MEMORANDUM

To: Jeffery Gold, Executive Vice President and Provost

From: Jo Li, Chancellor, University of Nebraska at Omaha

Date: May 14, 2024

RE: Program Proposal—Artificial Intelligence

The University of Nebraska at Omaha committees have reviewed and endorsed the creation of a new undergraduate program.

The Department of Computer Science requests the creation of a Bachelor of Science in Artificial Intelligence (BSAI). The transformative power of Artificial Intelligence (AI) is widely recognized and poised to reshape every facet of our daily lives. Recent breakthroughs, exemplified by innovations like ChatGPT, Gemini, LLAMA, Bard, Pi, Dall-E, and Sora, have ignited a pressing need for educational institutions to adapt swiftly to the burgeoning field of AI. The need to prepare a future workforce that is proficient in the fundamentals of AI and that is aware of the opportunities, as well as the challenges, posed by AI technologies is urgent. It is imperative for the metropolitan university of UNO to have a program that can better prepare our students in AI, empowering them to emerge as future leaders of the ongoing AI revolution.

Cc: David Jackson, Vice Provost
Phil He, Senior Vice Chancellor for Academic Affairs, Office of Academic Affairs
Martha Garcia-Murillo, Dean, College of Information Science and Technology
Angela Iwan, Executive Assistant to the Provost, Office of the Provost
Keristiena Dodge, Chief of Staff, Office of the Chancellor
Angie Sargus, Executive Associate, Academic Affairs

New Degree and Major Proposal Form

Descriptive Information

Name of Institution Proposing the Program:
University of Nebraska at Omaha

Name of the Proposed Program:
Artificial Intelligence

Degrees/credentials to be awarded graduates of the program:
Bachelor of Science in Artificial Intelligence, abbreviation of BSAI

Other programs offered in this field by this institution:
UNO BS/MS in CS with AI Concentration

CIP code: 11.0102

List the administrative units for the program:
Department of Computer Science

Proposed delivery Site:
University of Nebraska Omaha (UNO) campus: In-person

Date approved by governing board: TBD

Proposed date (term/year) the program will be initiated:
Fall 2025

I. Description of the Proposed Program

The transformative power of Artificial Intelligence (AI) is now widely recognized, poised to reshape every facet of our daily lives. Its impact spans socio-economic structures, technological ecosystems, global competitiveness, and the future of work. Recent breakthroughs, exemplified by innovations like ChatGPT, Gemini, LLAMA, Bard, Pi, Dall-E, and Sora, have ignited a pressing need for educational institutions to adapt swiftly to the burgeoning field of AI. Universities nationwide are keenly observing its profound influence on higher education. The need to prepare a future workforce that is proficient in the fundamentals of AI and that is aware of the opportunities as well as the challenges posed by the AI technologies is urgent. Advances in AI are progressing at a rapid pace. It is imperative for the metropolitan university of UNO to have a program that can better prepare our students in AI empowering them to emerge as future leaders of the ongoing AI revolution.

The Computer Science department, the designer of this proposal, unequivocally believes that a new BS degree in AI (BSAI) is the appropriate curricular pathway to prepare the future workforce in AI, and that the faculty in the computer science department at the college of IS&T are uniquely qualified, and well-equipped to deliver such a degree. The proposed BSAI degree will be a step towards forging a strong AI workforce for the state of Nebraska and our nation. This BSAI degree will be the first-of-its-kind at University of Nebraska-Omaha (UNO) and to the best of our knowledge, it will be the first such degree across the Nebraska University (NU) system. A timely assessment and launching of the BSAI degree will enable UNO to serve the larger Midwest region by partnering with AI related small businesses, availing state and federal government AI workforce development opportunities, and engaging the community and making them aware of the developments in the field of AI.

The mission of the BSAI program is to produce "AI-specialists/leaders" to meet the exploding demand of AI related jobs across the nation. The department proposes to develop a 4-year degree program, tailored to meet the demand and needs of academia, government, and industry for a future AI-ready workforce that can contribute to the socio-economic landscape of the state of Nebraska. The proposed program of study will prepare students through didactic courses teaching the foundational principles of AI, hands-on experiences, and projects/labs using latest AI technologies, and capstone term projects with clients.

The BSAI program educational objectives are to graduate students who:

- Attain a successful professional career in AI or related fields. Design and implement AI systems and AI-driven technologies to push boundaries of technological innovation, solve real-world problems, ethical decision making, empathy, enabling organizations to meet the opportunities and challenges of an AI-driven economy and improve the lives of people, communities and societies.
- Provide leadership, integrate multiple perspectives, mentor, and take responsibility for ethical and safe data collection and governance of data in emergent AI systems.
- Successfully adapt to the rapidly evolving AI landscape through life-long learning, community engagement, and endeavor to make AI technologies work for the larger social good.

II. Program of Study

2.1. Admission Requirements

The BSAI program is open to all UNO undergraduate students who are eligible to enroll in a program in the college of IS&T. The criteria and procedures for admitting students into the BSAI program adhere to those required for admission to UNO. These criteria are described on UNO's website Undergraduate Admissions | University of Nebraska Omaha (unomaha.edu). These requirements along with ACT or SAT scores, high school diploma or GED, and other application materials would be evaluated for admission to the University.

For transfer students, the ACT or SAT requirement must be supported by a GPA of 2.5. Transfer students must have a minimum of 12 credit hours.

a. **From within the Institution:** Students who transfer from within the University system to the Bachelor of Science in Artificial Intelligence are evaluated with the same

admission criteria as any other incoming students. Transfer credits are evaluated based on transfer credits grades and transfer guides developed by faculty members from the various institutions in the university system. Students must have an official transcript on file and have completed the course with a 'C- or better' to gain transfer credit for a course. The students also must have a cumulative GPA of 2.5 or better. Selected computer science core courses such as CIST 1400 Intro to Computer Science I and CSCI 1620 Intro to Computer Science II require a grade of C or better.

These transfer guides provide consistent course consideration based on review of syllabi by program faculty.

b. **From Another Institution**: Courses are transferred from two types of 'other institutions.' The first situation is a transfer request from an institution who has an existing set of course transfer equivalencies established with the College of IS&T. In this case, a transfer guide is available and is used to guide the recommendation for transfer credit. The second situation is when students seek to transfer coursework from other institutions will have to submit an official transcript to the University and a course syllabus to the College. The course syllabi and a copy of the transcript will be forwarded to college faculty with content expertise who will evaluate and recommend equivalency of transfer credit.

   Upon completion of evaluation of transfer credits, the College advisors document faculty recommendations in the student's file and in the TES- transfer equivalency system. The evaluations are communicated to the registrar office staff to update the equivalency on the student's academic record.

2.2. Major Topics

Major topics include English composition, Public speaking or Debate, College and Career Success, Natural &Physical Science, Social Sciences, Humanities and Fine Arts/US Diversity, Calculus I, Statistics, Linear Applied Linear Algebra, Mathematical Foundations of Computer Science, Introduction to Computer Science, Data Structures, Algorithms, Concepts and Principles of AI, Machine learning, Generative AI, AI/IT Ethics, and a capstone course. In addition, the students can pursue concentration area of emphasis or Core extension elective choosing topics from computer science, and AI concentration courses covering philosophy, information sciences. The program allows free electives for students to tailor programs integrating foundational aspects of AI with business, computer science, education, information systems, math, philosophy, natural/physical sciences, and social impacts. (Please see Appendix Attachment I for sample 4-year plan of study with these topics).

2.3. Program of Study

A minimum of 120 credit hours is required for a BSAI. A student must fulfill the university, college, and departmental requirements. Some courses may satisfy requirements in more than one area, but credit is awarded only once, thereby reducing the total number of credit hours for the degree to 120. For a BSAI degree, students must complete the following subject topic requirements.

University General Education (46 hours, 9 hours of which can be satisfied by courses in the required areas below; also assumes double counting 6 hours for humanities and diversity requirements)	31
Major Degree Requirements Core Courses (36 hours) Extension Courses (18 hours) Mathematics Courses (11 hours)	65
Electives	24
Total credits	120

2.3. Courses and Credit Hours

Course Number	Title and Description	Credit Hours	Competency Domain
CIST 1400 (Core)	**Introduction to Computer Science I:** This course is an introduction to computer science within the context of a high-level programming language. Students will be introduced to fundamental programming concepts and program design with the goal of solving computational problems. This course has a required laboratory component.	**3**	Introductory Computer Programming with Lab
CSCI 1620 (Core)	**Introduction to Computer Science II:** This course introduces students to advanced programming techniques and algorithm analysis. The topics covered will enable students to develop large-scale software with efficient algorithms that are maintainable. This course has a required laboratory component; students must register for the laboratory section attached to their lecture section.	**3**	Advanced Computer Programming with Lab
Math1950 (Math)	**Calculus I:** This is a course in plane analytic geometry emphasizing the study of functions, limits, derivatives and applications, and an introduction to integration.	**5**	Mathematics & general education quantitative reasoning
CSCI 2030 (Math)	**Foundations of Mathematics for Computer Science:** This course introduces discrete mathematics concepts that are foundational for the study of computer science such as functions, relations, and sets, basic logic, methods of proof, mathematical induction, computational complexity, recursion, counting, recurrences, relations.	**3**	Mathematical foundations of Artificial Intelligence
MATH 2050 (Math)	**Applied Linear Algebra:** This course presents Matrix algebra, simultaneous equations, vector spaces, with applications of linear algebra and computational considerations. Mathematical software is utilized, with required assignments.	**3**	Mathematics

AIML 2060 (Core *New Course*)	**Concepts in Artificial Intelligence:** This course will introduce students to the foundational concepts in Artificial Intelligence and provide a broad overview of topics including representation, heuristic search, automated problem-solving, decision-making, and machine learning. This course will be the first contact with AI concepts in the BSAI degree program and will.	**3**	AI foundations
CSCI 2410 (Core)	**Data Analytics in Python:** This course is an introduction to the basic concepts and principles of data analytics using Python language. The course emphasizes applying Python, libraries and special software packages to data munging, analysis, mining, and visualization, and machine learning techniques including statistical analysis, parameter estimation, regression, classification, predictive modeling etc.	**3**	AI foundations
CIST 2500 (Core)	**Introduction to Applied Statistics for IS&T:** The course emphasizes the function of statistics in information science and technology including topics such as descriptive statistical measures, probability discrete probability, sampling, estimation analysis, hypothesis testing, regression, and analysis of variance. Computer packages will be used for the problem-solving process.	**3**	Applied Mathematics
CIST 3000 (Core)	**Advanced Composition of IS&T:** Advanced Composition for IS&T provides students with instruction and practice in academic writing for the technical sciences. The course focuses on principles of rhetoric and composition, advanced library-based research techniques, academic modes of writing suited to the technical sciences, style, grammar, and punctuation, all with attention to adapting writing to suit the needs of various academic and professional audiences.	**3**	General Education Writing in the Discipline
CIST 3110 (Core)	**IT Ethics:** The course will cover the development and need for issues regarding privacy and the application of computer ethics to information technology.	**3**	Applied Information Science and AI and General Education Humanities
CIST 3320 (Core)	**Data Structures:** This is a core that will cover several data structures such as tree, hashing, priority queues and graphs as well as different algorithm design methods by examining common problem-solving techniques.	**3**	AI foundations
CSCI 3470 (Core)	**Fundamentals and Algorithms for Machine Learning:** This course discusses the fundamentals and algorithms of machine learning. Topics include supervised learning such as Decision Tree, Perceptron, Support Vector Machine, Naive Bayes, and Regression, unsupervised learning such as clustering, dimensionality reduction, kernel methods, learning theory such as bias/variance trade-offs, generalization, overfitting, and large margins.	**3**	AI foundations
CSCI 4100 (Core)	**Introduction to Algorithms:** The course provides students with a basic understanding of algorithm analyses. Main topics include growth of functions, asymptotic notation, recurrences, divide and conquer, sorting and its lower bounds, dynamic programming, greedy algorithms, graph traversal.	**3**	AI foundations
CSCI 4450 (Core)	**Principles of AI:** An introduction to principles of artificial intelligence. The course will cover topics such as machine problem solving, uninformed and informed	**3**	AI foundations

	searching, propositional logic, first order logic, approximate reasoning using Bayesian networks, temporal reasoning, planning under uncertainty and machine learning.		
AIML 4970 (Core *New Course*)	**AI Capstone:** The Capstone Project completes an Artificial Intelligence student's undergraduate experience. Students will address real-world problems by developing projects applying AIML-driven principles and reasoning skills acquired throughout their undergraduate study.	**3**	A hands-on project course with clients, assessments involving real-life AI applications.

2.3.1. Extension Coursework

The BSAI program requires 18 credits (6 courses at 3 credits each) to be used as extension classes. These courses can be selected by the students in consultation with their undergraduate advisors. They can also be selected to enable students to have a broader learning experience that widens their future career choices. As customary for the undergraduate programs in the CS department, the plans of studies with these courses are approved by the BSAI undergraduate program committee. The students can choose any 6 courses at the sophomore to senior levels with the CSCI prefix and course numbers 2xxx-4xxxx and/or from a set of pre-approved extension courses from other departments. More details about these courses available in CS undergraduate catalog course listings[1].

Extension Coursework (Choose 6 courses)

- Any CSCI courses numbered 2xxx-4xxx which are not used to meet other BSAI degree requirements may be used to satisfy extension coursework
- The following courses are also included because they are part of the existing BSCS AI Concentration:
    - PHIL2010: Symbolic Logic
    - ISQA 4010: Business Intelligence
    - MATH/STAT 4450: Machine Learning and Data Mining

Potential Concentrations

Extension coursework hours can be used to accommodate future concentrations. Recognizing that AI impacts multiple disciplines, we anticipate that new interdisciplinary concentrations can be added to the program after it is approved. This will enable students to specialize according to their interests. Concentration proposals will be reviewed and approved by the BSAI undergraduate program committee.

2.3.2. Free Electives

A total of 24 credits are provided as free electives. Students can work with the advisors to use these free electives as they prefer. The BSAI program has been designed with a sufficient

[1] https://catalog.unomaha.edu/undergraduate/coursesaz/csci/

number of free electives inspired by the transdisciplinary nature of AI. Students can avail these free electives to have a convergent learning experience that prepares them for a diverse set of future careers. Courses from any of the focus areas of the UNL Data Science program can be applied as free electives for the proposed BSAI program (example UNL elective courses that complement the degree requirements include but are not limited to CSCE 386, CSCE 486, MATH 435, NRES 418, PLAS 420, SOCI 407, STAT462, STAT 475).

2.3.3. 4-Year Plan

Student cohorts including those matriculating into UNO and transfer students will start the BSAI program in Fall semester. Students can complete the BSAI program in 4 years. A sample 4-year plan of study where the students enroll in 14-16 credits in Fall and Spring semesters is given below. Several existing courses that are a part of the BSAI curriculum are offered in summer sessions as well. Further, the transfer equivalencies established for these existing courses will carry over to the BSAI program as well. These will enable the BSAI students to accelerate and/or reduce course load during the Fall and Spring semesters.

Bachelor of Science in Artificial Intelligence Plan of Study

Year 1

Fall			Spring		
Course #	**Course Tital**	**Credits**	**Course #**	**Course Tital**	**Credits**
ENGL 1150	English Composition I	3	ENGL 1160	English Composition II	3
CMST 1110/2120	Public Speaking **OR** Debate	3	CSCI 1620	Intro to Computer Science II	3
MATH 1950	Calculus I	5	AIML 2060	Concepts in AI	3
CIST 1400	Intro to Computer Science I	3	CIST 2500	Stats for IS&T	3
Elective	CIST 1010 College & Career Success	1	Elective	Free Elective	3
	Semester Total:	15		Semester Total:	15
	Cumulative Total:	15		Cumulative Total:	30

Year 2

Fall			Spring		
Course #	**Course Tital**	**Credits**	**Course #**	**Course Tital**	**Credits**
CSCI 2410	Data Analytics in Python	3	CSCI 3320	Data Structures	3
CSCI 2030	Mathematical Foundations of Computer Science	3	MATH 2050	Applied Linear Algebra	3
GenEd	Natural & Physical Science with Lab	4	GenEd	Natural Science without lab	3
GenEd	Social Science Course	3	Elective	Free Elective	3
Elective	Free Elective	1	Elective	Free Elective	3
	Semester Total:	14		Semester Total:	15
	Cumulative Total:	44		Cumulative Total:	59

Year 3

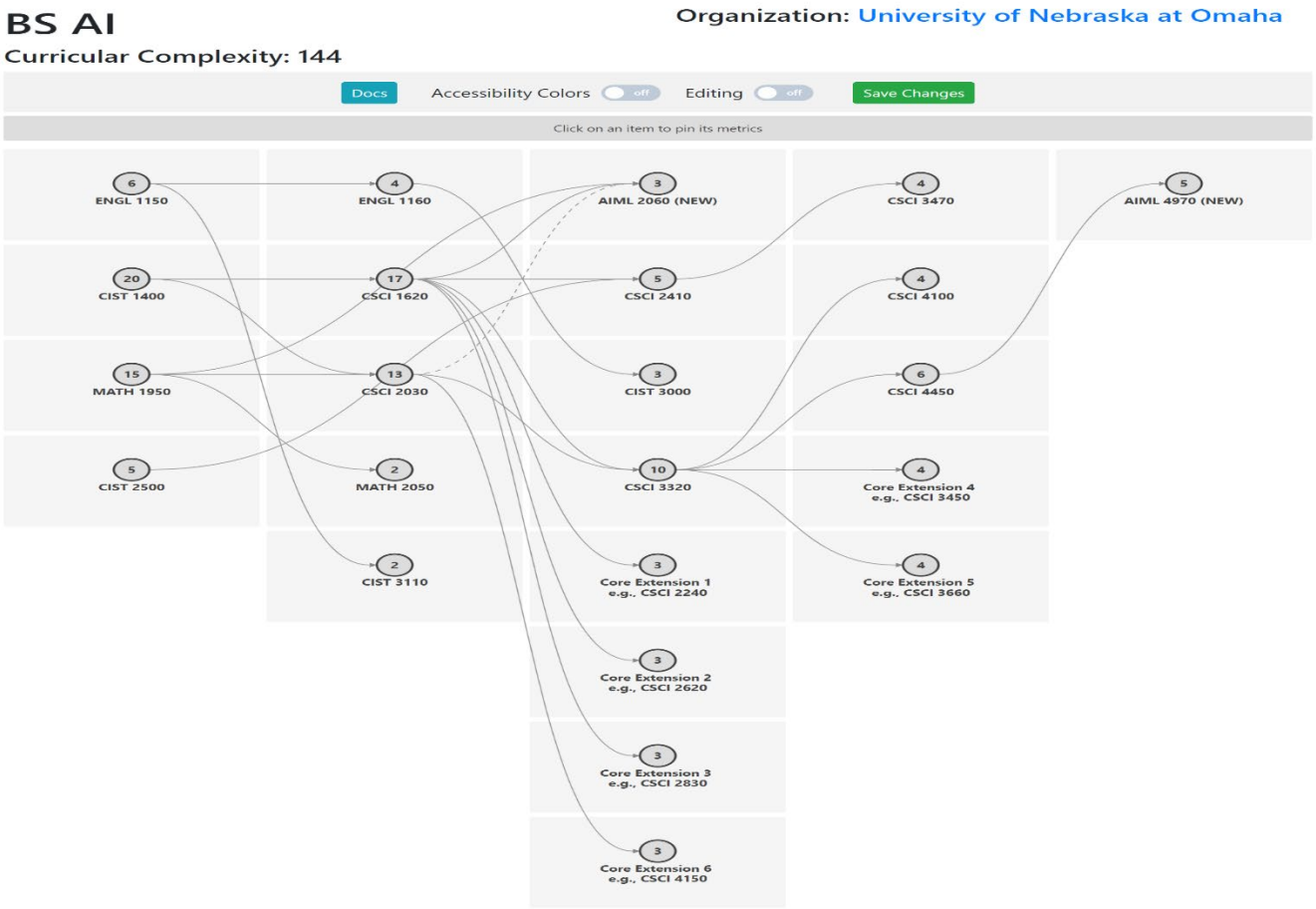
Fall			Spring		
Course #	**Course Tital**	**Credits**	**Course #**	**Course Tital**	**Credits**
CSCI 3470	Fundamentals & Algorithms of Machine Learning	3	CSCI 4100	Intro to Algorithms	3
Concentration Area of Emphasis or Core Extension Elective		3	CIST 3110	IT Ethics (*Also applies towards humanities)	3
CIST 3000	Advanced Composition for IS&T	3	Concentration Area of Emphasis or Core Extension Elective		3
GenEd	Social Science Course	3	GenEd	Humanities & Fine Arts/Global Diversity Course	3
GenEd	Humanities & Fine Arts/US Diversity	3	Elective	Free Elective	3
Elective	Free Elective	1			
		16		Semester Total:	15
	Cumulative Total:	75		Cumulative Total:	90

Year 4

Fall			Spring		
Course #	**Course Tital**	**Credits**	**Course #**	**Course Tital**	**Credits**
CSCI 4450	Principles of AI	3	AIML 4970	Capstone Course	3
Concentration Area of Emphasis or Core Extension Elective		3	Concentration Area of Emphasis or Core Extension Elective		3
Concentration Area of Emphasis or Core Extension Elective		3	Concentration Area of Emphasis or Core Extension Elective		3
GenEd	Social Science Course	3	Elective	Free Elective	3
Elective	Free Elective	3	Elective	Free Elective	3
	Semester Total:	15		Semester Total:	15
	Cumulative Total:	105		Cumulative Total:	120

2.3.4. Curricular Complexity

Curricular complexity is a measure that is inversely proportional to the graduation rate of a program of study. It captures the pre-requisites and the degree of dependencies among the courses in a program. The higher the degree of dependency, the higher the curricular complexity and higher the difficulty for the students to progress through the program and graduate. Higher curricular complexity is also usually an indication of the rigidity and limited flexibility of a program. The curricular complexity of the BSAI program is 144, which is significantly lower than the current BS CS program offered by the CS department. A goal of the BSAI program design was to keep the curricular complexity low to allow students to learn the foundational aspects of AI along with its diverse applications. The curricular complexity of the BSAI program is depicted in Figure 3.



III. Faculty, Staff, and other Resources

3.1. Resources for Implementation and Maintenance

The proposed BSAI program is built on the strong educational infrastructures, research resources, and successes of existing programs in the College of Information Science & Technology; the Peter Kiewit Institute of Information Science, Engineering, and Technology; the College of Engineering, and its Office of STEM Education initiatives. The college of IS&T has a successful Cybersecurity program that was previously built leveraging resources from the computer science and information system courses. The BSAI program is inspired by the resource sharing model underlying the cybersecurity program and will expand its resource utilization as the demand and enrollment increase.

The program can start in Fall 2025 and maintained for at least five years with support from at least 12 existing CS faculty (5 Instructors/Lecturers, 3 Assistant Professors, 1 Associate Professor, and 3 Professors) who currently teach the required BSAI courses.

3.2. Physical Facilities, Equipment and Informational Resources

While no new additional physical facilities are needed for this program, the program will need computers in the PKI classrooms to be equipped with open-source software platforms such as Tensorflow, Pytorch and ChatGPT for machine learning and generative AI prompt engineering courses. While most of the AI software platforms are available free of charge, some of the AI tools with API support imposes nominal charges for their uses. These could be covered through existing Technology Fees assessed on IS&T course offerings. Students will also be able to use Holland Computing Center, AI labs and their GPU machines for capstone courses for the first 5 years. Dedicated GPU servers at the college of IS&T with UNO IT support may be acquired to address equipment shortages as the enrollments increase in the long-term.

3.3. Current vs Additional Resources

The BSAI program will be implemented leveraging the currently available faculty resources, physical facilities, instructional equipment and informational resources to deliver almost all the BSAI program. We will use our IT support to install new (freely available) AI software tools in the PKI classrooms.

The proposed curriculum includes 2 new courses, one of which is already planned for development to support the existing BS Computer Science program. Only the proposed Capstone course AIML 4970 would exclusively serve this program, and it would be offered initially only once a year starting in year 4 after the program is created. Thus, eventually the program would require a new 0.125 FTE faculty effort per academic year.

3.3.1 Administration

The BSAI program has been designed to allow for the creation of new concentrations in the future. The governance of this degree and its concentrations are managed by an AI undergraduate program committee (UPC) whose responsibilities include:

a. Deciding what courses are offered under the AIML course designation

b. Working with faculty and approving SLOs, and content more broadly, for all AIML-designated courses.
c. Managing the content for AIML Core courses
d. Deciding what concentrations to offer within the BSAI program
e. Approving of special topics offerings
f. Approving of internships and independent studies
g. Report to CS department and the College Academic Committee
h. Document workflows and processes, reviewing them annually, in consultation with the rest of the committee, to keep them up to date
i. Handle all appeals and other management tasks
j. Manage course and catalog update entry, if/when changes are made by the cognizant concentration committees
k. Act as the primary point of contact for advising staff and the dean's office for the AIML program.
l. Coordinate program reviews, working with the concentration committees and the GPC
m. Schedule and conduct advisory board meetings, working with the concentration chairs for contact management
n. Handle general education assessments for program-specific classes
o. Student award/designation handling

The CS department, body of the whole, will maintain a veto privilege for decisions made by the program committee. The IS&T College Academic committee governs all courses and programs in the college, as specified in its charge in IS&T college governance documents.

3.4. Budgetary Considerations

The BSAI degree could be offered at minimal additional cost to the College of IS&T during its first five years.

The CCPE expense table estimates the following direct costs:

- 0.125 FTE faculty time beginning in year 4 to account for the cost of offering the dedicated capstone course for this program once annually once students reach that point in the curriculum. This pro-rated cost is estimated from a 9-month base salary of $130,000 with 28% fringe benefits and a 3% increase in year 5. All other instruction costs are assumed to be subsumed by the BS CS degree since the necessary courses are already scheduled regularly.
- Advising support staff cost is estimated using a base advisor salary of $55,000 with 28% fringe benefits and 3% annual increases amortized over approximately 350 students per advisor. Projected support staff costs for the program annually are computed by multiplying this amortized amount by total expected enrollment of the program (see table 1 in section 4.3).

- General operating costs of $3000 are expected during the first five years to support modest marketing needs of the program. Pro-rated professional development costs for the 0.125 FTE faculty member are also included starting in year 4.
- Equipment costs are shown in the budget table based on the full technology fee rate which would be assessed to the students in the program based on anticipated enrollments to capture the total technology maintenance costs to UNO. However, we recognize that only a portion of these costs would be returned to IS&T for maintenance of the shared technology infrastructure supporting all degree programs based on current allocation practices.
- Library/Information Resources are projected using the anticipated full library services fee revenue generated by students in the BSAI program. There are no specific additional library needs tied to this program; rather, this line item captures the general cost to UNO for these students to use the library and its resources.
- Other expenses are budgeted as equal to the total annual student fee revenue generated less costs already captured by the equipment and library line items. Since student fees are generally assumed to be tied to costs during the fiscal year in which they are generated, this line item ensures the CCPE budget model does not artificially inflate revenue based on student fees.

The CCPE revenue table assumes that the sole source of support for this program will be tuition and fees directly generated by students in the program. Tuition is projected based on estimated annual enrollments (see table 1 in section 4.3) with an average credit load of 12 credits per fall/spring per student and a fixed average in-person resident tuition rate of $268 per credit hour. The tuition rate conservatively assumes that 50% of the coursework will be billed using IS&T's higher differential tuition while the rest will be billed using the general UNO rate. Fee revenues are estimated using the current UNO undergraduate fee table, assuming that all coursework is in-person.

These estimated budget projections ultimately amount to a net amortized return of approximately $5,9000 per enrolled BSAI student each year.

IV. Evidence of Need and Demand

Market analyses using the US Department of Post-Secondary Education Data System (IPEDS) indicate that AI-related degree conferrals have steadily increased over 120% over the last decade. Bachelors in AI degrees, increased from 60K in 2011 to over 140K in 2021 (see Figure)[2]. These programs grew by 323% over 2018-2022[3]. The demand for these programs is likely to accelerate even more with the arrival of new AI technologies since 2022. The growth in completions in these programs was around 188% over 2018-2022. Though, Bachelor's in AI degree is conferred by around 55 institutions across US, only a couple of institutions offer Bachelor's in AI regionally. Further, only 31% of the AI market share is held by the public 4-year institutions whereas 66% of the market share is held by the private not-for-profit institutions charging higher tuition rates. The job prospects for graduates with AI skills are very healthy with close to 200,000 postings over the last 3 years by around 15,000 employers and a median advertised salary over 100k dollars. The proposed Bachelor's in AI degree, BSAI, will empower our students to become future leaders in AI, inform our local community of AI developments, and create an AI talent pool that can profoundly impact the future economy of our state.

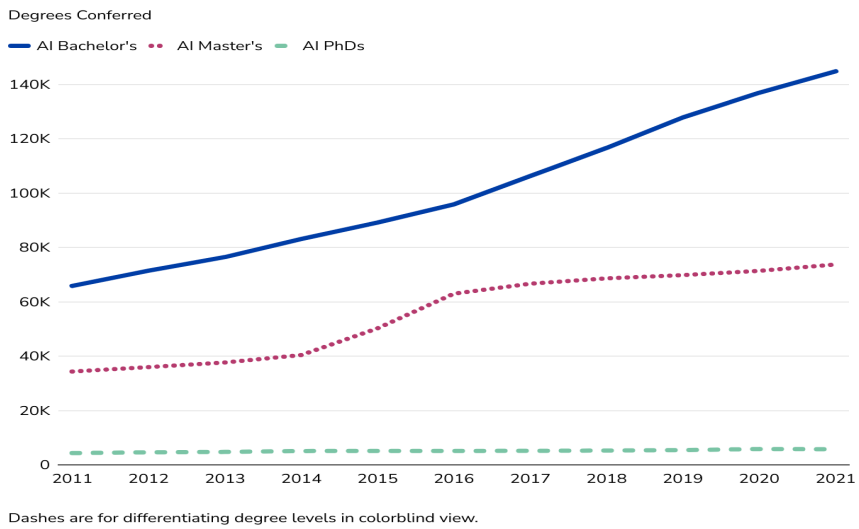


Figure 1: AI-related Degrees (Courtesy: CSET Report on AI)

4.1. Employment and Educational Advancement Opportunities

The demand and need for AI professionals is acute across several sectors including Financial Services, Healthcare, Technology, Media, Marketing, Government and Military, and National Security. As per world economic forum 2022, the demand for AI professionals has increased by 450% since 2013. The demand for AI specialists is projected to grow at 40% from 2023-2025 and the jobs requiring AI skills are expected to increase by 58% as per the economic forum report. As

[2] https://cset.georgetown.edu/publication/leading-the-charge-a-look-at-the-top-producing-ai-programs-in-u-s-colleges-and-universities/

[3] UNO ILCI market analyses

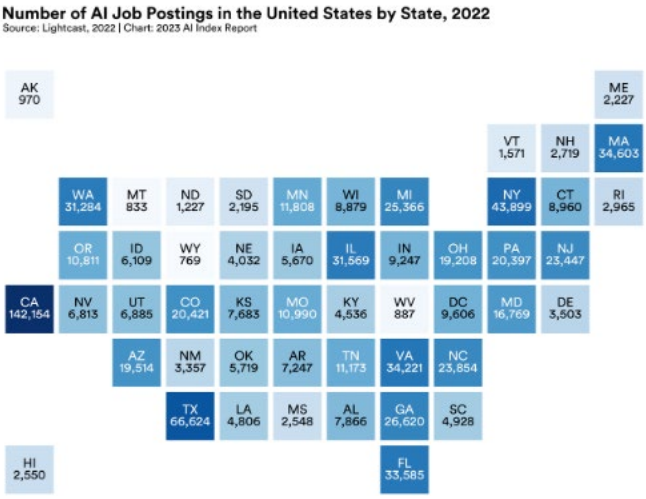


Figure 2: US AI job demand in 2022.

per IDC's official report the global spending on AI systems is anticipated to reach $97.9 billion by the end of 2023 with a compound annual growth rate (CAGR) of 28.4% over the past 5 years. According to a report by LinkedIn, AI specialist is the #1 emerging job in the US with a 74% annual growth rate in the job postings over the last five years. More details are available from the Onhires report[4]. A summary list of career paths in AI[5] is described in Appendix Attachment I. A statewide posting of AI job postings[6] from the US Bureau of Labor and statistics[7] shows a total of 20345 AI job posting in Nebraska and its four neighbors, in 2022. 4032 AI job postings were in our state.

4.2. Enrollment Projections

Based on the university Program Development Guide (https://www.unomaha.edu/academic-affairs/_files/documents/curriculum/program-unit-development-guide-2023.pdf), the CCPE threshold for viability is 7 graduates per year. We believe the BSAI program can easily achieve this. Since the BSAI program will be implemented with the existing faculty in the Computer Science Department and all the classes being offered can be taken by students in the BSCS program, except for the AI Capstone course, the minimum number of students required to make the program fiscally viable is very low. There is very little risk of required classes getting cancelled due to low enrollment, and historical enrollments in them from BSCS students has been strong (ie., 30-40 students per course section). If the capstone course which is unique to the program is offered only once a year, as few as 10 students per admission cohort would be needed to meet UNO's current minimum scheduling guidelines.

We conservatively estimate 10-20 new students being admitted to the program annually, which is similar to the organic growth rates of recent BS program launches in IS&T. With a more deliberate marketing campaign about the new program regionally within OUR tuition states, there is potential for significantly more aggressive growth.

Additionally, our enrollment projections estimate that that between 5-7 students already at UNO will change majors into the AI degree program. The College of IS&T admits over 250 new undergraduate students a year, and historically the bulk of them declare Computer Science at the time of admission. Once on campus, a subset of these students change majors within the first year or two once they learn more about the more specialized degrees within the college. We project

[4] https://www.onhires.com/blog-post/statistics-and-forecasts-for-recruiting-in-ai
[5] https://onlinedegrees.sandiego.edu/artificial-intelligence-jobs/
[6] https://lightcast.io/resources/blog/demand-for-ai-skills-continues-climbing
[7] https://www.bls.gov/opub/mlr/2023/article/industry-and-occupational-employment-projections-overview-and-highlights-2022-32.htm#_edn39

that approximately 2-3% of the total newly admitted IS&T cohort each year will internally transfer into the BSAI degree after joining UNO.

The table below shows enrollment and graduation projections for the first five years while assuming a conservative year-to-year estimated retention rate of 85%. In total, we believe the program has the potential to reach 90-100 total enrolled students by the 2029-2030 academic year.

Table 1: Five Year Enrollment and Graduation Projections

	2025-26	2026-27	2027-28	2028-29	2029-30
Continuing Students	0	8	23	39	53
New Admits	10	15	20	25	30
Internal Transfers	0	5	5	7	7
Total Enrolled	10	28	48	71	90
Graduates	0	0	2	8	14
Est. Retention Rate	85%	85%	85%	85%	85%

V. Partnerships with Business

The BSAI program will leverage numerous collaborative activities between the UNO Computer Science department, the college of IS&T, and local areas businesses, that include:

- Computer Science faculty have conducted several Generative AI lectures and workshops in 2023-2024 for businesses including Physician's Mutual, Union Pacific, Mutual of Omaha, Standard Nutrition, and National Association of Insurance Commissioners (NAIC) at Omaha and Orlando Florida attended by several hundreds of participants. Some of these industry engagements has led to the establishment of student scholarships for CS majors in the college. Through the BSAI program, we will continue and expand these community engagements to showcase student achievements, get internship and scholarships for BSAI majors.
- CS faculty offered a short course on Generative AI in the J-term for the local industry in Fall 2023 and are offering a micro-credential on Generative AI in 2024 to raise awareness of AI in the local industries, and the Omaha larger community. BSAI program when implemented will provide pathways for continuing students to pursue a career with AI skills.
- The BSAI program will leverage the five-fold expansion of Scott Scholar interns at Union Pacific in 2024 and beyond to provide high quality AI internships to the BSAI majors. The career connect program at the campus level will also be leveraged to pair BSAI students with local area companies and organizations for paid internship positions.
- Annual CS Education Week (since 2009) have been conducted for area high schools, including quiz bowl and programming contests, that involve over 150 students and over 30 grade 9-12 teachers as team coaches. Google has been a key sponsor of this event. BSAI program will also leverage this event by enhancing to include events where students detect deepfakes, create AI-assisted arts and games.
- CS faculty have hosted several REU sites about mobile computing and IoT security and privacy. Our recruitment networks for these sites will be used to springboard REU sites for AI providing research opportunities for the BSAI program.
- Aim for the Stars, CodeCrush, and iSTEM after School – These three programs directly engage middle and high school students and teachers in Nebraska and surrounding states in computing

education and training. The BSAI program will allow AI related topics to be infused in these programs.

VI. Collaborations within the University of Nebraska

The College of IS&T proposed the HARC (Human Artificial Intelligence, Robotics Consortium) in 2019, involving 4 the Colleges of Arts and Sciences (CAS), the College of Business (CBA), College Fine Arts and Media (CFAM), College of Education (CEHHS), and College of Public Affairs and Community Service (CPACS) with participation of around 14 faculty from these units. The HARC initiative was selected as one of the 10 big ideas for the UNO campus that year. The department faculty have continued to collaborate with faculty from these colleges in terms of cross-listing of courses, obtain joint research awards and co-supervise students in AI related projects and theses. CS faculty with research expertise in AI, regularly collaborate with faculty at departments of Philosophy and Mathematics/Statistics from CAS in curricular development and AI related hiring. They have procured joint federal and state awards in collaboration with faculty at the Aviation Institute, Emergency Management, and Digital Governance Analytics from CPACS. Faculty at the Biomechanics and teacher education and leadership from CEHHS have been regular collaborators with CS department leading in NSF awards. Faculty members from CBA and Psychology are collaborators in several active AI-related NSF grant submissions. The BSAI program and its curriculum are designed to foster and further these collaborations. For instance, courses from Philosophy and Math are included in the BSAI curriculum and a few free electives are provided to enable transdisciplinary and convergent AI experiences in the BSAI capstone projects.

AI and especially machine learning projects have been pivotal in the collaborations of the CS faculty with UNL and UNMC. CS faculty have several ongoing collaborations (that have been supported through the Collaboration Initiative Awards) with UNL faculty. Most prominently, the federally funded "Bridge Health" project is a collaborative project involving CS and college of IS&T faculty with UNL engineers. In addition, CS faculty have ongoing projects with UNL Institute of Agriculture and Natural Resources on the study of Nebraska invasives, Animal Health, and resilient agriculture group. The CS faculty have had a long history of collaboration with UNMC including the department of Pathology, Visual Sciences, and Surgery. Machine learning plays a crucial role in medical imaging-based disease detection and management. The BSAI program will further these collaborations and provide opportunities to the BSAI program students to apply AI techniques to accelerate discovery and improve healthcare.

VII. Collaborations with Higher Education Institutions and Agencies External to the University

AI has been designated as one of the grand challenges by NSF. CS faculty along with others from the college have several ongoing collaborations in AI and its applications to science and Engineering. CS faculty along with the South Dakota School of Mines were awarded the NSF award ($6 million total) for the Data Driven Material Discovery. This collaboration has led to a book on Machine Learning, several machine learning models and over 20 conference and journal publications applying machine learning and AI for material discovery. Subsequently, UNO CS faculty were also one of the 4 lead partners for the NSF Engineering Research Center ($52 million

total) program. The team has made it to the final stage of the Blue Ribbon panel visit to the NSF headquarters and awaits results in Spring 2024. CS faculty have also active research collaborations with South Dakota, Kansas State, Montana State, and the University of Oklahoma. These collaborations have resulted in the submission of two grant proposals to NSF ($12 million) total in January 2024. UNO is the lead in one of these proposals and is a lead partner for AI in the other. In addition, CS faculty have been invited to lead the AI efforts in the formation of an AI Institute for 2D materials and to compete for an NSF AI Institute grant in 2024. NSF AI Institutes continue to be one of the largest government award programs to spur research, education, and community awareness in AI technologies. CS AI faculty were invited and collaborated with Minnesota, New Mexico in proposing an AI Institute precision agriculture in the recent past. Our participation in these large collaborative federal grant competitions have raised the visibility of UNO's AI expertise across several of these universities in the region. A CS faculty serves as the leader of the AI initiatives in the newly formed NSF TIP directorate enhancing our national AI footprint even further. Establishment of the BSAI program at UNO is timely and will be highly synergistic with these collaborations and strengthen them further.

VIII. Centrality to Role and Mission of the Institution

The proposed BSAI program supports numerous goals, sub-goals and objectives of the University of Nebraska, UNO, the College of Information Science & Technology, as well as the collaborating Department of Computer Science and its internal and external collaborators, as noted below:

- The proposed BSAI program enhances and furthers UNO's goal of national recognition, innovation and leadership in STEM education. AI/ML education is widely acknowledged to have a transformative potential and improve the quality of life, locally, nationally, and globally, which is well aligned with the mission of UNO. UNO has recognized the importance of STEM as being critical to its metropolitan university mission and has designated STEM as one of five campus priority areas (See Campus Priorities: Charting a Clear Vision for 20/20, UNO, February 2012).
- The UNO Spring 2023 strategic planning forum identified the Future of Work and Career Connect as two crucial UNO initiatives. The BSAI program supports both these strategic initiatives, especially the Future of Work initiative focused on "the rise of chatbots and AI, its growing role in society, and the workplace, and the opportunities and threats facing the use of AI and automation". BSAI program will forge a future AI workforce that is aware of both the opportunities and challenges of AI and help the communities navigate these technologies for the social good.
- The proposed BSAI program aligns well with the mission of the college of IS&T, "to keep students at the center of all college and IS&T efforts; strive to achieve the highest academic excellence; actively collaborate with academic, business, and community entities on various projects related to IS&T". The BSAI program is student centric and provides them with AI skills that are increasingly becoming essential to have a successful IS&T career in the future. Besides increasing our national visibility through undergraduate research, the program will also serve the needs of our local businesses and higher education institutes in creating a future AI workforce.
- The proposed BSAI degree program will, in part, fulfill the mission statements of the Department of Computer Science "to provide outstanding undergraduate and graduate education in computer science;" and "to integrate our educational, research, and service

activities with other programs in the college and the university and with the communities we serve to reflect the role of computer science in information science and technology." (See CS department Strategic Plan – Mission and Vision Statements, http://cs.unomaha.edu).

IX. Consistency with the University of Nebraska's Five-Year Strategy

The BSAI degree program builds upon the University of Nebraska (NU)'s strategic four focus[8] areas on access, affordability, and attainment, talent development, culture, diversity and inclusion, and partnerships. The BSAI program at the undergraduate level will support the NU's first strategic area by providing access to the rapid advances in the high-tech field of AI to students from Nebraska's high schools and transfer institutions including community colleges through NU's affordable programs and attain proficiency in AI technology. The BSAI supports the second focus area on talent development by contributing towards filling the 34,000 annual openings in the high-skill, high-demand, and high-wage (H3) future jobs in the state of Nebraska. The recent advances in AI have highlighted its immense benefits along with its potential for bias in its algorithms that can impact communities in diverse ways. The BSAI degree program aims to produce future AI specialists and leaders who can play an active role in developing equitable AI technologies for the larger social good. Finally, many of our partners from government, academia, and industries are actively looking forward to an AI-skilled future workforce to remain globally competitive. The BSAI program will forge a strong workforce in AI to meet the demands and needs of our partners and create new collaboration avenues for scholarships from UNO alumni.

[8] https://nebraska.edu/-/media/unca/docs/offices-and-policies/documents/strategic-plans/university-of-nebraska-five-year-strategy.pdf?la=en

X. Avoidance of Unnecessary Duplication

After a careful search, the University of Nebraska is unaware of any undergraduate program like BSAI in the state of Nebraska. As per the UNO ILCI market analyses report[3], Illinois Institute of Technology (IIT), Indiana-University-Purdue University (IUPUI), Kansas State University (KSU) in the Midwest region offer programs related to the proposed BSAI program. Drake University has also recently launched a BS in AI program. The colleges of Arts and Sciences, Engineering, and Agricultural and Natural Sciences at the University of Nebraska Lincoln (UNL) offer an interdisciplinary major in data science preparing students with skills and competencies in data analyses, algorithm design and problem solving with foundational knowledge in statistics, mathematics, and the computer sciences provided by the participant colleges.

The IIT BS in AI program is offered by the College of Computing that consists of Applied Mathematics, Computer Science, and Information Technology Departments. The 2022 IPEDS Tuition and Fees for this program is $50,279. The IIT AI program requires a student to complete 127 credits[9] which is seven more than the 120 credits required to complete the UNO's BSAI program. The extensive Math (6 courses including Calculus II) and Physics (2 calculus-based Physics courses) requirements have higher curricular complexity and provide limited flexibility to students to pursue computing and AI courses and design AI-driven concentration areas of emphasis. The UNL program requires students to select any two out of the available focus areas, one of which is AI. Students are not required to choose AI. However, students interested in AI must complete an additional focus area. The UNL program aims to provide a broader interdisciplinary education in data sciences. In contrast, the proposed BSAI degree program is focused on AI, requiring AI courses from the sophomore level to the senior level. The program aims to provide students with a broad knowledge of generative, symbolic, and machine learning AI technologies and applications to produce a future workforce that can contribute to diverse careers in AI-enabled and AI-driven system development including applications.

The free electives in the proposed BSAI program will allow students to obtain a transdisciplinary and convergent AI learning experience, empowering them to apply AI technologies in a multitude of domains in their future careers.

The IUPUI BS in AI program[10] is offered by the Computer Information Science Department in their School of Science which also includes the Natural Sciences, Earth and Environmental Sciences, Forensic and Investigative Sciences, Psychology and Neuroscience departments. The 2022 IPEDS Tuition and Fees for this program is $11,447. The program is offered with two concentrations -- Data and computational science and Intelligent Control Systems (offered jointly with the School of Engineering). The IUPUI AI program requires students to complete 128 credits, eight more than the proposed BSAI program. This program is similar to IIT program in terms of Math (8 courses including Calculus I, II, and Multivariate Calculus) and 4 Life Science electives including a Neuroscience elective. The proposed BSAI curriculum has lesser curricular complexity and provides deeper explorations within the subfields of AI based on the concentration areas of

[9] https://bulletin.iit.edu/undergraduate/colleges/computing/computer-science/bs-artificial-intelligence/#samplecurriculumtext

[10] https://science.iupui.edu/cs/academics/degrees-and-programs/_degrees/artificial-intelligence-bs-iupui-aiscibs.html

emphasis. Students can also get a transdisciplinary experience that is difficult to obtain in the IUPUI program.

The Kansas State University provides a totally online Machine learning and Autonomous systems bachelor's degree program[11]. The tuition rate is $351.20 per credit hour and the students are required to complete 120 credit hours. This degree is significantly different from the proposed BSAI degree in terms of its exclusive focus on machine learning sub-area of AI and in being a 100% online degree. Carnegie Mellon University offers a BS in AI program at the East Coast. The 2022 IPEDS Tuition and Fees for this program is $60,584.

At UNO, the BSAI degree has been designed to synergistically operate with the BS CS program. The BSAI program shares several CS introductory courses with BS CS. The degree has been designed for students to focus on AI and machine learning foundations and applications while providing them with the flexibility in electives and extension coursework. The BS in CS degree provides an AI concentration pathway. This pathway requires students to pursue several systems and math core requirements that arise from the ABET requirements for CS degree. Students opting for a rigorous and comprehensive foundations in computer science along with a specialized set of AI courses can pursue BS in CS with AI concentration pathway. Students opting for a rigorous and comprehensive foundation in artificial intelligence and machine learning can pursue the BS in AI; they can take several of the computer science courses using core extensions and electives. This new degree will also enable the students to obtain a CS minor through the core-extension and elective classes. The BSAI program is also vertically aligned with UNO's fast track and MS CS graduate programs. The MS in CS degree provides 1) thesis, 2) project-equivalent thesis, and 3) course work options. Graduates of BSAI program can pursue the MS in CS options 1) and 2), by choosing CSCI 4220 and CSCI 4830 in their extension's coursework. They need to complete additional computer science systems courses to pursue the coursework options.

XI. Consistency with the Comprehensive Statewide Plan for Postsecondary Education

Meeting the Needs of Students. The proposed BSAI degree provides a flexible pathway to an AI degree by providing a small core of required courses and enabling flexibility for students through 18 credits of core extensions and 24 credits of free electives. This would enable interested transfer students to include previously earned credits towards the completion of this degree, making for a more affordable college education.

Meeting the Needs of the State. With the remarkable rise in industrial adoption of AI in the last decade and even more so in the last 2 years, the proposed BSAI degree shows the university being responsive to the workforce development and ongoing training needs of employers and industries. AI is becoming ubiquitous in urban as well as rural communities, in consumer products as well as business processes. As previously discussed, there is a growing demand for a workforce who master the technical and ethical challenges of applying this technology in contributing to the economic prosperity of the state and its diverse communities.

[11] https://online.k-state.edu/programs/machine-learning-and-autonomous-systems-bachelors/

Meeting the Needs by Building Exemplary Institutions. The proposed BSAI degree enhances UNO's capability to compare favorably with its peer institutions. By being among the first of its peers to offer such a degree, UNO will be in position to provide an exemplar AI education for its peers that strikes a balance between theory and practice, filling in the gap between the vocational AI associate's degrees that are starting to be offered at community colleges and the theory-focused AI degrees currently being offered at the graduate level by research universities.

Furthermore, the degree will have the same assurance of quality as the other computing-related degrees (e.g., Computer Science, Cybersecurity, etc.) offered by UNO, which are accredited through the Higher Learning Commission and, in some degrees, by discipline-specific accreditation bodies such as ABET.

Meeting Educational Needs through Partnerships and Collaboration. The proposed BSAI degree will leverage existing partnerships with, and educational programs for, Computer Science teachers in primary and secondary schools to train CS teachers in the basics of AI. UNO currently offers the MS in Computer Science Education program and the Graduate Certificate in Computer Science, both of which are completely online. New courses, such as AI for Teachers can be developed as electives within these programs. An increasing number of Nebraska teachers are enrolling in these degrees due to LB 1112. These teachers in turn can educate students to develop literacy in AI, understanding its current challenges and ethical applications.

Lastly, the degree will also leverage existing partnerships between the university and local industries who have been participating in the industrial advisory boards of the College of IS&T and the CS Department. The inputs of these partners have been invaluable towards the continued growth and evolution of UNO's computing degrees, resulting in the introduction of cloud computing courses and the launching of a Graduate Certificate in Machine Learning. The BSAI degree represents the next step in this partnership.

Attachment I

Summary of Career Paths in AI

Career Path	Description	Median Annual Salary
Big Data Analyst	Find meaningful patterns in data by looking at the past to help make predictions about the future.	$133,442
User Experience (UX) Designer/Developer	Work with products to help customers understand their function and can use them easily. Understand how people use equipment and how computer scientists can apply that understanding to produce more advanced software.	$77,398
Natural Language Processing Engineer	Explore the connection between human language and computational systems; this includes working on projects like chatbots and virtual assistants.	$111,000
Researcher	Work with computer science and AI research Discover ways to advance AI technology	$53,460
Research Scientist	Expert in applied math, machine learning, deep learning, and computational stats. Expected to have an advanced degree in computer science or an advanced degree in a related field supported by experience.	$123,279
Software Engineer	Develop programs in which AI tools function. The role may also be referred to as a Programmer or Artificial Intelligence Developer.	$88,896
AI Engineer	Build AI models from scratch and help product managers and stakeholders understand results.	$126,536
Data Mining and Analysis	Finding anomalies, patterns, etc. within large data sets to predict outcomes.	$93,044
Machine Learning Engineer	Using data to design, build and manage ML software applications.	$145,296
Data Scientist	Collect, analyze and interpret data sets.	$119,313
Business Intelligence (BI) Developer	Analyze complex data sets to identify business and market trends	$92,283
Big Data Engineer/Architect	Develop systems that allow businesses to communicate and collect data	$142,783
Robotics Engineer	Design, build and test robots or robotic systems.	$100,640
Computer Vision Engineer	Develop and work on projects and systems involving visual data.	$104,258

TABLE 1: PROJECTED EXPENSES - UNO BS in Artificial Intelligence (BSAI)

	(FY 2025-26) Year 1	(FY2026-27) Year 2	(FY 2027-28) Year 3	(FY2028-29) Year 4	(FY 2029-30) Year 5	
Personnel						**Cost**
Faculty [1]	$0	$0	$0	$20,800	$21,424	$42,224
Professional	$0	$0	$0	$0	$0	$0
Graduate assistants	$0	$0	$0	$0	$0	$0
Support staff [2]	$2,011	$5,801	$10,234	$15,566	$20,275	$53,888
Subtotal	$2,011	$5,801	$10,234	$36,366	$41,699	$96,112
Operating						
General Operating [3]	$3,000	$3,000	$3,000	$3,188	$3,188	$15,375
Equipment [4]	$2,640	$7,392	$12,672	$18,744	$23,760	$65,208
New or renovated space [5]	$0	$0	$0	$0	$0	$0
Library/Information Resources [6]	$1,980	$5,544	$9,504	$14,058	$17,820	$48,906
Other [7]	$7,762	$21,734	$37,258	$55,111	$69,859	$191,724
Subtotal	$15,382	$37,670	$62,434	$91,100	$114,626	$321,213
Total Expenses	$17,393.53	$43,470.84	$72,668.23	$127,466.86	$156,325.60	**$417,325.05**

CCPE; 11/19/08

[1] 0.125 FTE faculty to teach dedicated capstone once annually starting in year 4. Base salary of $130,000 with 28% benefits and 3% annual increase.

[2] Staff advisor salary prorated per BSAI student assuming $55,000 base salary with 28% benefits and 3% annual increases.

[3] Marketing and advertising expenses at $3000 annually with prorated faculty professional development costs incurred by IS&T from year 4 on

[4] Total UNO technology costs estimated at 100% of technology fee revenue annually.

[6] Total UNO library costs estimated at 100% of library services fee revenue annually.

[7] Other campus costs estimated at 100% of remaining fee revenue less technology and library costs in previous line items.

TABLE 2: REVENUE SOURCES FOR PROJECTED EXPENSES - UNO BS in Artificial Intelligence (BSAI)

	(FY 2025-26) Year 1	(FY2026-27) Year 2	(FY 2027-28) Year 3	(FY2028-29) Year 4	(FY 2029-30) Year 5	**Total**
Reallocation of Existing Funds [1]	$0	$0	$0	$0	$0	$0
Required New Public Funds [2]	$0	$0	$0	$0	$0	$0
1. State Funds	$0	$0	$0	$0	$0	$0
2. Local Tax Funds (community colleges)	$0	$0	$0	$0	$0	$0
Tuition and Fees [3]	$76,702	$214,766	$368,170	$544,585	$690,319	$1,894,542
Other Funding [4]	$0	$0	$0	$0	$0	$0
1						$0
2						$0
3						$0
Total Revenue [5]	$76,702	$214,766	$368,170	$544,585	$690,319	$1,894,542

[3] Tuition is estimated at an average resident rate of $268 per credit hour assuming 12 credits per student per fall/spring term. Fee revenue is estimated using UNO's current rates. No increases to either fees or tuition are assumed.

TUITION + FEE PROJECTION - UNO BS in Artificial Intelligence (BSAI)

	2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**
Projected Enrollment	10	28	48	71	90
Estimated SCH (avg 12 credits per sen	240	672	1152	1704	2160
Estimated Tuition ($268 weighted average resident in-person tuition rate with no increases)	$ 64,320.00	$ 180,096.00	$ 308,736.00	$ 456,672.00	$ 578,880.00
Cultural Enrichment Fee ($7.50 per st	$ 75.00	$ 210.00	$ 360.00	$ 532.50	$ 675.00
IS&T Student Success Fee ($25 per stu	$ 250.00	$ 700.00	$ 1,200.00	$ 1,775.00	$ 2,250.00
Library Services Fee ($8.25 per credit	$ 1,980.00	$ 5,544.00	$ 9,504.00	$ 14,058.00	$ 17,820.00
MavCard Services Fee ($7.75 per stud	$ 77.50	$ 217.00	$ 372.00	$ 550.25	$ 697.50
Student Access and Success Fee ($120	$ 1,200.00	$ 3,360.00	$ 5,760.00	$ 8,520.00	$ 10,800.00
Student Research Fee ($3.00 per cred	$ 720.00	$ 2,016.00	$ 3,456.00	$ 5,112.00	$ 6,480.00
Technoloogy Fee ($11.00 per credit h	$ 2,640.00	$ 7,392.00	$ 12,672.00	$ 18,744.00	$ 23,760.00
UPF ($543.96 per student)	$ 5,439.60	$ 15,230.88	$ 26,110.08	$ 38,621.16	$ 48,956.40
Fee Subtotal	$ 12,382.10	$ 34,669.88	$ 59,434.08	$ 87,912.91	$ 111,438.90
Tuition + Fees	$ 76,702.10	$ 214,765.88	$ 368,170.08	$ 544,584.91	$ 690,318.90

To: Office of Academic Affairs

From: Dr. Martha Garcia-Murillo, Dean of IS&T

Date: April 17, 2024

Subject: BS in Artificial Intelligence

The faculty of the Computer Science Department have proposed creation of a new BS degree in "Artificial Intelligence" with a new course prefix of AIML (Artificial Intelligence / Machine Learning). This new program seeks to capitalize on considerable student interest and market demand for learning specialized skills in AI. The proposed program is distinct from existing degrees offered by the College of IS&T both in its specialized nature but also in offering students substantial programmatic flexibility so that they can combine applied AI skills to other problem domains by easily adding minors or double majors without significantly extending time to degree.

The proposed BS in AI degree was unanimously approved by the College of IS&T Academic Committee on April 5, 2024. Industry representatives who serve on the IS&T Advisory Board have shared considerable enthusiasm about the potential impact that a BS in Artificial Intelligence relative to local workforce needs. I fully support the creation of this new degree program as outlined in the proposal.

Impact on Resources

The proposal projects appropriate enrollment growth in this new degree program over its first five years given available market data. During this initial period, we anticipate only modest resources needed to execute this program. The proposed curriculum relies primarily on existing coursework which is regularly offered and required by the existing BS in Computer Science, which will subsume most instructional costs. One additional course section per year is anticipated (0.125 FTE) for a dedicated AI Capstone course, and this will only be needed beginning in year 4. As shown in the CCPE budget tables, projected personnel and operating costs for this degree should be readily covered by tuition and fees with a net return of $3.00 to $4.00 for every $1.00 newly invested during its first five years. Thus, this program is likely to serve as a net revenue generator for UNO and the College of IS&T, even from its first year of existence.

University of Nebraska Omaha
College of Information Science & Technology, Office of the Dean
6001 Dodge Street, PKI 172 | Omaha, NE 68182 | 402.554.2277 | mcarciam@unomaha.edu
https://www.unomaha.edu

May 10, 2024

Dr. Sarah Edwards
Assistant Vice Chancellor for Curriculum & Programs
Office of Academic Affairs

Dear Dr. Edwards,

The College of Arts and Sciences' Educational Policy Committee met on Friday, May 10, 2024, and approved the Bachelor of Science in Artificial Intelligence proposed by the College of Information Science and Technology. This is an important contribution and response to the challenges and opportunities posed by AI, and I fully support this proposal.

Sincerely,

Dr. Melanie Bloom
Dean, College of Arts and Sciences
Professor of World Languages and Literature
University of Nebraska at Omaha

CC: Dr. Martha Garcia-Murillo, Dean of IS&T; Dr. Brian Dorn, Associate Dean, IS&T; Denise Devney, Office of Academic Affairs

University of Nebraska Omaha
College of Arts and Sciences | Office of the Dean
6001 Dodge St. | Omaha, NE 68182-0013 | Administration: 402.554.2338 | Advising: 402.554.2458
www.unomaha.edu/cas

To: Office of Academic Affairs

From: Andrew W. Swift, Chair, Department of Mathematical and Statistical Sciences

Date: April 23, 2024

Subject: BS in Artificial Intelligence Proposal

I am writing on behalf of the Department of Mathematical and Statistical Sciences in the College of Arts and Sciences to express our support for the proposed BS in Artificial Intelligence. Our involvement in this program includes students mandatorily taking MATH 1950 Calculus I and MATH 2050 Linear Algebra as part of the major degree requirements as well as optionally taking MATH/STAT 4450 Machine Learning and Data Mining, should they choose this as an extension course within their plan of study.

The three courses mentioned above already exists and are offered regularly. Based on the proposed enrollment projections, we do not anticipate issues with adding students from Artificial Intelligence within the existing course capacity.

Sincerely,

Andrew W. Swift, DSc.
Associate Professor and Chair
Mathematical and Statistical Sciences

University of Nebraska Omaha

COLLEGE OF ARTS AND SCIENCES - PHILOSOPHY

April 17, 2024

Dr. Subramaniam,

UNO's Philosophy Program strongly supports the proposal for the *Bachelor of Science in Artificial Intelligence (BSAI)*. Given the unimaginable impact and incredible growth of AI, there is an obvious demand for qualified graduates with an education focused in the field. The BSAI provides an important and necessary alternative to existing programmatic offerings at UNO and other nearby institutions.

UNO's Philosophy Program greatly appreciates our on-going collaborative relationship with UNO's Computer Science Department, particularly around the area of AI. We are very happy to have our *PHIL 2010 Symbolic Logic* course included within the BSAI program. Moreover, we are excited by the prospect of developing future courses to help support the development and growth of the BSAI, especially around Ethics of AI.

We particularly appreciate that the BSAI proposal allows students to focus on developing a technical mastery in AI while also controlling the credit hours required by the major. We suspect that by controlling the required credit hours, the proposed BSAI will allow more students the opportunity to expand their knowledge, skills, and career prospects with additional coursework from across the university, particularly with second majors.

By helping students more deeply develop essential skills of speaking, writing, and general critical thinking, Philosophy makes for a particularly apt pairing with the BSAI. Moreover, I think that our two concentrations in Philosophy are especially well designed to complement the BSAI.

> Our concentration in *Brains, Minds, and Machines* is perfectly constructed to help students appreciate the connection of AI to the fields of Philosophy, Psychology, and Neuroscience. Being able to draw such interdisciplinary connections expands students career prospects to the wide range of fields that will be increasingly impacted by developments in AI.
>
> Our concentration in *Ethics, Law, and Social-Political Philosophy* is especially well tailored to provide students the contextual understanding to appreciate how AI is and will continue to impact society at large. Indeed, AI raises a host of new questions from *Whose creative contributions can be included in training sets for AI art generators*? to *Should AI be allowed to make consequential decisions in the field of battle?* Combining the technical knowledge of the BSAI with our philosophical training around ethics, law, and political philosophy will help prepare the future leaders needed to develop the policies and legal structures that this new technology is going to require.

Moreover, since a second major in Philosophy only requires 30 credit hours, students can add a major in Philosophy to the BSAI without exploding the number of credit hours needed for graduation.

As we have discussed in person, I also expect there are a number of potential research intersections across the university that would benefit from having an undergraduate program focused on AI.

We look forward to working with you on this and eagerly anticipate resulting closer ties between our programs.

Sincerely,

William J Melanson

William J. Melanson
Associate Professor and Chair of Philosophy
wmelanson@unomaha.edu
402-554-2877

NOVEMBER 9, 2023

PROGRAM OVERVIEW: BS ARTIFICIAL INTELLIGENCE

John Kerins

NEW MARKET RESEARCH ANALYST, ILCI

The purpose of this report is to give insight into the market conditions surrounding a potential bachelor's degree program in Artificial Intelligence, specifically the regional/national completions trends and the demand in the labor market for this kind of education. The market was examined on a regional and national level, with regional being defined as within the states of NE, IA, KS, MO, WI, MN, IL, SD, ND, WY, and CO due to a limited number of competitors in the market.

The National Center for Education Statistics(NCES) currently reports completions in Artificial Intelligence programs under the CIP code 11.0102, and this CIP code will be used to define potential competitor programs.

TABLE OF CONTENTS

ARTIFICIAL INTELLIGENCE COMPLETIONS, ALL AWARD LEVELS, NATIONAL

PROGRAM OVERVIEW

55
Institutions
323% Growth (2018-2022)

712
Completions
188% Growth (2018-2022)

Completions Distribution

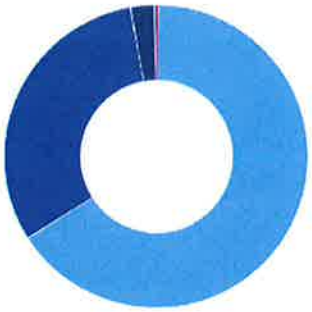
Average: 12.9

1 — 185

Median: 6

	Completions (2022)	% Completions	Institutions (2022)	% Institutions
All Programs	712	100%	55	100%
Distance Offered Programs	52	7%	11	20%
Non-Distance Offered Programs	660	93%	44	80%

MARKET SHARE BY INSTITUTION TYPE

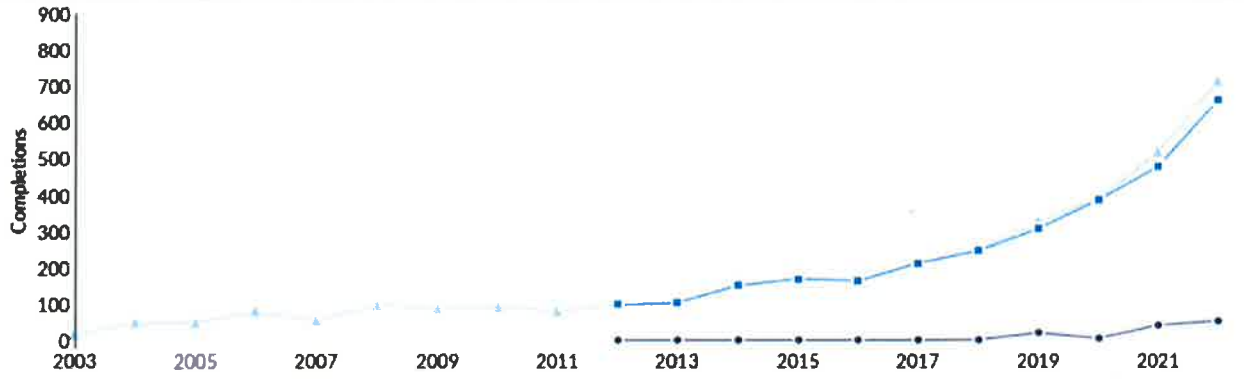


Institution Type	Completions (2022)	Market Share
Private not-for-profit, 4-year or above	469	65.9%
Public, 4-year or above	222	31.2%
Private for-profit, 4-year or above	18	2.5%
Public, 2-year	3	0.4%

COMPLETIONS BY TOP INSTITUTIONS

Institution	Completions (2022)	Growth % YOY (2022)	Market Share (2022)	IPEDS Tuition & Fees (2022)	Completions Trend (2018-2022)
⊞ Carnegie Mellon University	185	10.1%	26.0%	$60,854	
⊞ University of Pennsylvania	66	-24.1%	9.3%	$63,452	
⊞ Pennsylvania State University-Main Campus	37	Insf. Data	5.2%	$19,835	
⊞ University of Washington-Seattle Campus	31	-39.2%	4.4%	$12,242	
⊞ Boston University	30	20.0%	4.2%	$62,360	
⊞ University of North Texas	28	Insf. Data	3.9%	$11,140	
⊞ University of Southern California	23	228.6%	3.2%	$64,726	
⊞ Northeastern University	22	2,100.0%	3.1%	$60,192	
⊞ University of California-Santa Cruz	20	Insf. Data	2.8%	$14,240	
⊞ Illinois Institute of Technology	18	200.0%	2.5%	$50,279	

REGIONAL COMPLETIONS TREND



	2012 Completions	2022 Completions	% Change
Distance Offered Programs	0	52	+Insf. Data
Non-Distance Offered Programs	98	660	+573.5%
All Programs	98	712	+626.5%

COMPLETIONS BY AWARD LEVEL

Award Level	Completions (2022)	Percent
Award of less than 1 academic year	10	1.4%
Associate's Degree	7	1.0%
Bachelor's Degree	104	14.6%
Postbaccalaureate certificate	69	9.7%
Master's Degree	485	68.1%
Doctor's Degree	37	5.2%
Award of at least 1 but less than 2 academic years	0	0.0%
Award of at least 2 but less than 4 academic years	0	0.0%
Post-masters certificate	0	0.0%

SIMILAR PROGRAMS

110

Programs (2022)

852,040

Completions (2022)

CIP Code	Program	Completions (2022)
52.0201	Business Administration and Management, General	342,045
11.0701	Computer Science	60,381
11.0101	Computer and Information Sciences, General	52,124
14.1901	Mechanical Engineering	44,494
11.0103	Information Technology	33,097

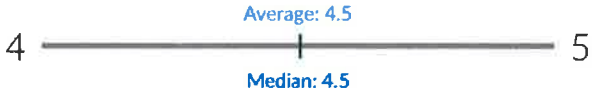
BS ARTIFICIAL INTELLIGENCE COMPLETIONS, REGIONAL

PROGRAM OVERVIEW

2
Institutions

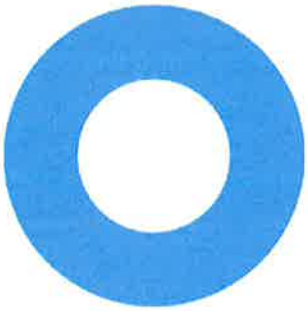
9
Completions

Completions Distribution



	Completions (2022)	% Completions	Institutions (2022)	% Institutions
All Programs	9	100%	2	100%
Distance Offered Programs	0	0%	0	0%
Non-Distance Offered Programs	9	100%	2	100%

MARKET SHARE BY INSTITUTION TYPE

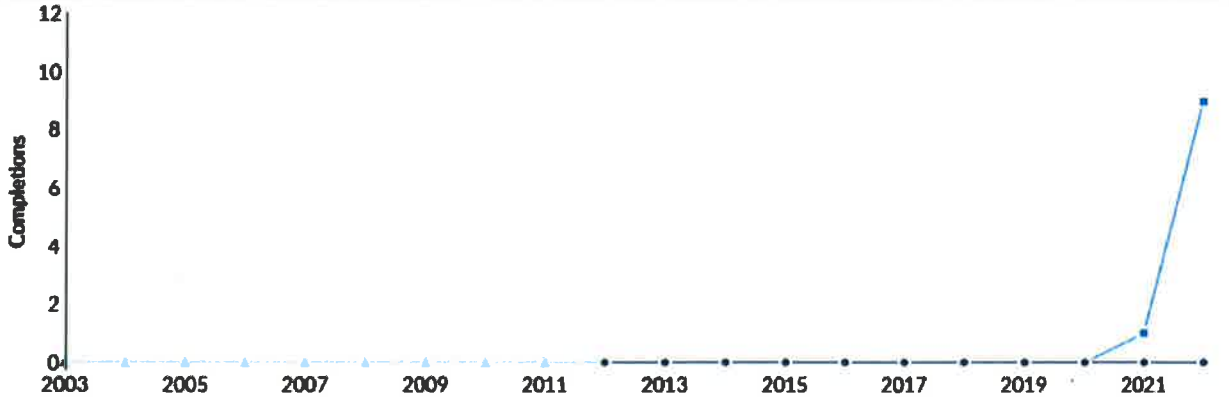


Institution Type	Completions (2022)	Market Share
Private not-for-profit, 4-year or above	9	100.0%

COMPLETIONS BY TOP INSTITUTIONS

Institution	Bachelor's Degree Completions (2022)	Growth % YOY (2022)	Market Share (2022)	IPEDS Tuition & Fees (2022)	Completions Trend (2018-2022)
⊞ Concordia University-Wisconsin	5	Insf. Data	55.6%	$33,062	
⊞ Illinois Institute of Technology	4	300.0%	44.4%	$50,279	

REGIONAL COMPLETIONS TREND



	2012 Completions	2022 Completions	% Change
Distance Offered Programs	0	0	0.0%
Non-Distance Offered Programs	0	9	+Insf. Data
All Programs	0	9	+Insf. Data

SIMILAR PROGRAMS

78

Programs (2022)

53,883

Completions (2022)

CIP Code	Program	Bachelor's Degree Completions (2022)
52.0201	Business Administration and Management, General	17,650
11.0701	Computer Science	5,826
14.1901	Mechanical Engineering	5,232
11.0101	Computer and Information Sciences, General	3,059
14.0801	Civil Engineering, General	2,155

BS ARTIFICIAL INTELLIGENCE COMPLETIONS, NATIONAL

PROGRAM OVERVIEW

8
Institutions
300% Growth (2018-2022)

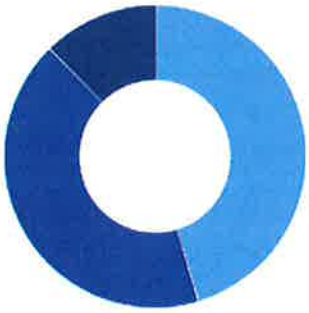
104
Completions
845% Growth (2018-2022)

Completions Distribution

1 — Average: 13 — 38
Median: 5.5

	Completions (2022)	% Completions	Institutions (2022)	% Institutions
All Programs	104	100%	8	100%
Distance Offered Programs	5	5%	1	13%
Non-Distance Offered Programs	99	95%	7	88%

MARKET SHARE BY INSTITUTION TYPE

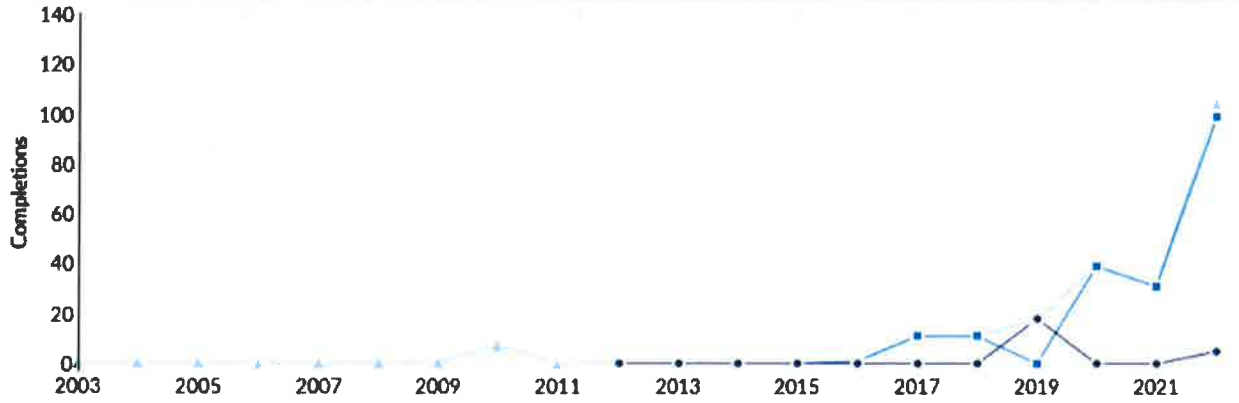


Institution Type	Completions (2022)	Market Share
Private not-for-profit, 4-year or above	47	45.2%
Public, 4-year or above	44	42.3%
Private for-profit, 4-year or above	13	12.5%

COMPLETIONS BY TOP INSTITUTIONS

Institution	Bachelor's Degree Completions (2022)	Growth % YOY (2022)	Market Share (2022)	IPEDS Tuition & Fees (2022)	Completions Trend (2018-2022)
⊞ Carnegie Mellon University	38	137.5%	36.5%	$60,854	
⊞ Pennsylvania State University-Main Campus	37	Insf. Data	35.6%	$19,835	
⊞ Full Sail University	8	-27.3%	7.7%	$26,307	
⊞ SUNY College at Plattsburgh	6	200.0%	5.8%	$8,881	
⊞ Concordia University-Wisconsin	5	Insf. Data	4.8%	$33,062	
⊞ University of Advancing Technology	5	Insf. Data	4.8%	$18,708	
⊞ Illinois Institute of Technology	4	300.0%	3.8%	$50,279	
⊞ Indiana University-Bloomington	1	0.0%	1.0%	$11,447	

NATIONAL COMPLETIONS TREND



	2012 Completions	2022 Completions	% Change
Distance Offered Programs	0	5	+Insf. Data
Non-Distance Offered Programs	0	99	+Insf. Data
All Programs	0	104	+Insf. Data

Ira A. Fulton Schools of Engineering
Arizona State University

To:

Dr. Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska, Omaha

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

sincerely,

Chitta Baral
Professor
School of Computing and Augmented Intelligence
Arizona State University

School of Computing and Augmented Intelligence
PO Box 878809 Tempe, AZ 85287-8809
p: 480-965-3190 **f:** 480-965-2751 **web:** scai.engineering.asu.edu

Millard
PUBLIC SCHOOLS

Don Stroh Administration Center • 5606 So. 147th Street • Omaha, NE 68137 • 402-715-8200 • Fax 402-715-8448

May 24, 2024

To

Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. With the increased interest in AI among our students, BSAI provides a good pathway for them to further their interests in AI. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

Yours Sincerely,

Dr. Anthony Weers
Millard Public Schools
5606 S 147th St
Omaha, NE 68137

Aksarben Foundation
2120 South 72nd Street, Suite 800
Omaha, NE 68124
aksarben.org

May 31, 2024

Mahadevan Subramaniam
Professor and Chairperson, Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Dr. Subramaniam,

I am writing to express my strong support for the University of Nebraska at Omaha's proposed Bachelor of Science in Artificial Intelligence (BSAI) program. As President of the Aksarben Foundation, I have witnessed firsthand the transformative power of technology and innovation on our community and beyond.

In the past year, the rapid advancements in Generative AI and other AI technologies have underscored the urgent need for specialized education in this field. The integration of AI across various industries highlights the necessity for a workforce that is proficient in AI principles and applications. This new degree program is not only timely but essential in preparing students to meet the challenges and opportunities presented by this dynamic and evolving technology landscape.

The proposed BSAI program will provide students with a comprehensive understanding of AI technologies, platforms, ethics, and fairness, all of which are critical components in today's tech-driven world. By offering this degree, UNO's Computer Science Department will equip students with the skills and knowledge needed to excel in AI-related careers, thereby addressing the growing demand for AI expertise in academia, industry, and government.

We at the Aksarben Foundation are particularly excited about the potential impact of this program on our local community. The increased interest in AI among students is a clear indicator of the need for such a program. The BSAI degree will not only foster students' interests but also prepare them for the future workforce, contributing to the economic growth and technological advancement of our region.

In conclusion, I wholeheartedly support the BSAI program and encourage its approval at the state level. This program represents a significant step forward in aligning educational offerings with the needs of our rapidly changing world. I am confident that it will greatly benefit our students and the broader community.

Thank you for considering my endorsement. Please do not hesitate to contact me if you require any further information.

Warm regards,

Sandra Reding
President
Aksarben Foundation

Powered by Aksarben

Northeast Nebraska Growing Together
NEBRASKA TECH COLLABORATIVE
internNE Powered by Aksarben
FULLVALUE AGRICULTURE Powered by Aksarben

To
Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha
Date: May 29, 2024

Dear Subramaniam,

In light of the rapid advancements in Artificial Intelligence, it is imperative to equip the future workforce with comprehensive knowledge and skills in this transformative field. We foresee AI principles and AI-driven technologies, along with ethical considerations and fairness, playing an increasingly significant role across various disciplines in higher education. Given the heightened interest in AI among students, the proposed Bachelor of Science in Artificial Intelligence (BSAI) program at UNO's Computer Science Department is both timely and essential.

As the Coordinator of Engagement, Curriculum, Instruction, and High-Ability Learning for Nebraska City Public Schools, I work directly with students, educators, and curriculum developers to foster a robust educational environment. My role has given me unique insights into the growing need for advanced technological education among K-12 students. With the new legislation requiring a Computer Science and Technology course for high school graduation, students will engage with essential topics such as best practices in computer literacy, ethical digital citizenship, information technology concepts, cybersecurity fundamentals, computational thinking, and programming literacy.

These topics ensure that students gain a comprehensive understanding of computing, develop critical skills in AI, data analysis, cybersecurity, and programming, and learn to navigate the ethical implications of technology. The proposed BSAI program at UNO will provide a crucial pathway for these students to continue their studies in AI, building on the foundational skills they acquire in high school. This seamless transition from secondary to post-secondary education will prepare them for the evolving demands of the workforce, ensuring they are well-equipped to meet the challenges and opportunities presented by rapid technological advancements.

Furthermore, as the secretary of the Nebraska Association for Curriculum, Instruction, and Assessment (NACIA), I have been involved in statewide educational initiatives that emphasize the importance of integrating technology and innovative curricula into K-12 education. This role has highlighted the growing need for advanced technological education among students who are eager for opportunities to engage with cutting-edge technologies. Additionally, as a former secretary for the Nebraska Association for the Gifted (NAG), I have observed a significant

interest in AI-related fields among high-ability students. The BSAI program will cater to this interest and help cultivate a new generation of innovators and leaders in AI.

We fully support the BSAI program at UNO and believe it will significantly contribute to preparing a skilled workforce ready to meet the demands of academia, industry, and government as AI technologies become increasingly integral.

Yours sincerely,

Kate Sherwin
Coordinator of Engagement, Curriculum, Instruction, and High-Ability Learning
Nebraska City Public Schools
1700 14th Avenue
Nebraska City, NE 68410

To

Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. With the increased interest in AI among our students, BSAI provides a good pathway for them to further their interests in AI. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

Yours Sincerely,

Arthur L. Brown II

Arthur L. Brown II, M.S.Ed.
Dean of Information Technology
Metropolitan Community College
30th & Fort Street
Omaha, Nebraska 68111

e: abrownii@mccneb.edu
p: 531.622.2322

To
Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha
Date: May 29, 2024

Dear Subramaniam,

In light of the rapid advancements in Artificial Intelligence, it is imperative to equip the future workforce with comprehensive knowledge and skills in this transformative field. We foresee AI principles and AI-driven technologies, along with ethical considerations and fairness, playing an increasingly significant role across various disciplines in higher education. Given the heightened interest in AI among students, the proposed Bachelor of Science in Artificial Intelligence (BSAI) program at UNO's Computer Science Department is both timely and essential.

As the Coordinator of Engagement, Curriculum, Instruction, and High-Ability Learning for Nebraska City Public Schools, I work directly with students, educators, and curriculum developers to foster a robust educational environment. My role has given me unique insights into the growing need for advanced technological education among K-12 students. With the new legislation requiring a Computer Science and Technology course for high school graduation, students will engage with essential topics such as best practices in computer literacy, ethical digital citizenship, information technology concepts, cybersecurity fundamentals, computational thinking, and programming literacy.

These topics ensure that students gain a comprehensive understanding of computing, develop critical skills in AI, data analysis, cybersecurity, and programming, and learn to navigate the ethical implications of technology. The proposed BSAI program at UNO will provide a crucial pathway for these students to continue their studies in AI, building on the foundational skills they acquire in high school. This seamless transition from secondary to post-secondary education will prepare them for the evolving demands of the workforce, ensuring they are well-equipped to meet the challenges and opportunities presented by rapid technological advancements.

Furthermore, as the secretary of the Nebraska Association for Curriculum, Instruction, and Assessment (NACIA), I have been involved in statewide educational initiatives that emphasize the importance of integrating technology and innovative curricula into K-12 education. This role has highlighted the growing need for advanced technological education among students who are eager for opportunities to engage with cutting-edge technologies. Additionally, as a former secretary for the Nebraska Association for the Gifted (NAG), I have observed a significant

interest in AI-related fields among high-ability students. The BSAI program will cater to this interest and help cultivate a new generation of innovators and leaders in AI.

We fully support the BSAI program at UNO and believe it will significantly contribute to preparing a skilled workforce ready to meet the demands of academia, industry, and government as AI technologies become increasingly integral.

Yours sincerely,

Kate Sherwin
Coordinator of Engagement, Curriculum, Instruction, and High-Ability Learning
Nebraska City Public Schools
1700 14th Avenue
Nebraska City, NE 68410

Buildertrend

Jon Walker
Buildertrend
11818 I St.
Omaha, NE 68137

May 21st, 2024

Dr. Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. At Buildertrend, we anticipate AI-based technologies and platforms will play a significant and expansive role in shaping our organization's future success. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department at UNO is timely, essential, and will meet Buildertrend's demand for professionals trained in AI. We expect these demands to grow as AI technologies become more integral to our operations. We welcome this program initiative and look forward to BSAI graduates from UNO joining our teams.

Sincerely,

Jon Walker
Chief Technology Officer
Buildertrend

BUILDING AMERICA®

20th May, 2024

To
Mahadevan Subramaniam,
Professor and Chairperson,
Computer Science Department College of Information Science and Technology,
University of Nebraska, Omaha

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and application is crucial. At Union Pacific Railroad, we anticipate AI-Based technologies and platforms will play a significant and expansive role in shaping our organization's future success. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department at UNO is timely, essential and will meet the needs of the state as well as potentially for Union Pacific Railroads' demand for professionals trained in AI. We expect these demands to grow as AI technologies become more integral to our operations. We welcome this program initiative and look forward to BSAI graduates from UNO joining tech teams in Nebraska such as ours.

Yours Sincerely,

Rahul Jalali
Executive Vice President, Chief Information Officer
Union Pacific Railroad

UNION PACIFIC RAILROAD
1400 Douglas Street, 6th Floor
Omaha, Nebraska 68179

Rahul Jalali
EVP & Chief Information Officer

P 402-544-6181
E rahul.jalali@up.com

fnbo

Dr. Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

May 20, 2024

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. At FNBO, we anticipate AI-based technologies and platforms will play a significant and expansive role in shaping our organization's future success. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department at UNO is timely, essential, and will help prepare students to meet our need for professionals trained in AI. We expect these demands to grow as AI technologies become more integral to our operations. We welcome this program initiative and look forward seeing UNO graduate students from BSAI.

Yours Sincerely,

Matthew S. Spyers

SVP, Chief Technology Officer

To

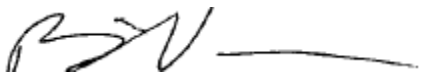
Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

May 16th 2024.

Dear Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. At Pacific Life we anticipate AI-based technologies and platforms will play a significant and expansive role in shaping our organization's future success. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department is timely, essential, and will meet Pacific Life's demand for professionals trained in AI. We expect these demands to grow as AI technologies become more integral to our operations. We welcome this program initiative and look forward to BSAI graduates from UNO joining our teams.

Yours Sincerely,



Scott Vassar, AVP of Technology Services

Pacific Life

6750 Mercy Road, Omaha, NE 68106

Mutual of Omaha Insurance Company

3300 Mutual of Omaha Plaza
Omaha, NE 68175
mutualofomaha.com

May 20, 2024

Dr. Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology University of Nebraska at Omaha

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. At Mutual of Omaha, we anticipate AI-based technologies and platforms will play a significant and expansive role in shaping our organization's future success. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department at UNO is timely, essential, and will meet Mutual of Omaha demand for professionals trained in AI. We expect these demands to grow as AI technologies become more integral to our operations. We welcome this program initiative and look forward to BSAI graduates from UNO joining our teams.

Yours Sincerely,

Mike Lechtenberger

Mike Lechtenberger
Chief Information Officer
Mutual of Omaha

May 22, 2024

Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science & Technology
University of Nebraska-Omaha

Dear Dr. Subramaniam,

I am writing to express my support for the proposal to establish a new bachelor's degree program in Artificial Intelligence (AI) at the University of Nebraska-Omaha's College of Information Science & Technology. I believe that this program will provide a valuable opportunity for students to learn the theory and practice of AI, as well as its applications and implications in various domains.

AI is one of the most rapidly developing and impactful fields of science and technology in the 21st century. It has the potential to transform many aspects of our society, economy and environment. However, it also poses significant challenges and risks that require informed and critical perspectives. Therefore, it is essential to educate and train the next generation of AI professionals who have not only the technical skills but also the broader knowledge and awareness of the opportunities and responsibilities of AI.

The proposed degree program in AI will address this need and will also prepare students for dynamic and diverse career paths in AI. Moreover, the program will enhance the visibility and reputation of the University of Nebraska as a leader and pioneer in AI education and research in the region and beyond.

As a lifelong Nebraskan and as a technology leader, I have witnessed the increasing demand and need for professionals with AI expertise and trust the College of Information Science & Technology to provide students the education to meet these needs. I strongly support the proposal to establish a Bachelor of Science in Artificial Intelligence at UNO's College of Information Science & Technology.

Sincerely,

Melissa Moreno, EdD
Senior Vice President & Chief Information Officer
Lindsay Corporation

May 20, 2024

To
Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,
With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. At the Nebraska Startup Academy, we anticipate AI-based technologies and platforms will play a significant and expansive role in shaping the future success of startups and the broader entrepreneurial ecosystem in Nebraska. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the Computer Science Department is timely, essential, and will meet the demand for professionals trained in AI within our network, across the state, and beyond.
Our vision is to establish Nebraska as a Midwest innovation hub, and the integration of AI expertise is a pivotal component in realizing this goal. We expect the demand for AI professionals to grow as these technologies become more integral to the operations and growth strategies of startups and corporations alike. The BSAI program will undoubtedly equip students with the skills needed to innovate, support, and drive technological advancements in our community leading to economic development that will keep our best and brightest here in Nebraska upon graduation.
We welcome this program initiative and look forward to collaborating with the BSAI program, as well as working with its graduates who will contribute to the vibrant startup ecosystem we are fostering, and corporations who are looking for solutions to the gap they are experiencing in AI.

Yours sincerely,

Charlie Cuddy
President and Executive Director, Nebraska Startup Academy

Columbus, GA, May 18, 2024

To

Mahadevan Subramaniam
Professor and Chairperson
Department of Computer Science
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

Yours Sincerely,

Rania Hodhod

Rania Hodhod, Chair and Professor of Computer Science
Columbus State University
4225 University Avenue
Columbus, GA, 31907

NM STATE UNIVERSITY

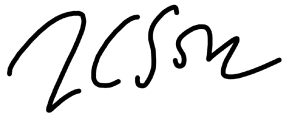
College of Arts and Sciences
(1290 Frenger Mall, SH 123)
Department of Computer Science, MSC CS
New Mexico State University
P.O. Box 30001
Las Cruces, NM 88003-8001
575-646-3723
www.cs.nmsu.edu

To: Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Professor Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

Yours Sincerely,



Son Tran, Ph.D., Professor and Head
Computer Science Department
New Mexico State University
Las Cruces, NM 88011

UNIVERSITY OF KENTUCKY

COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE

M. Truszczyński
101 Davis Marksbury Building
329 Rose Street
Lexington, KY 40506-0633

(859) 257-3963
mirek@cs.uky.edu

May 24, 2024

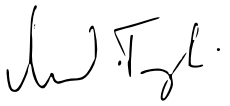
Dr. Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Dr. Subramaniam,

It is a pleasure to write this letter concerning the proposal for the Bachelor's in Artificial Intelligence (BSAI) program that was developed by the UNO's Computer Science Department. With the rapid ascent of Artificial Intelligence (AI) into a critical factor of all domains of human activity, educating and training a future workforce proficient in AI, in its fundamental principles and applications is crucial. I anticipate AI principles and AI-driven technologies and platforms, aware of ethics and fairness issues, to play a significant and expansive cross-cutting role in higher education across disciplines.

I carefully reviewed the description of the proposed program that you made available to me. I find it well designed, carefully thought through, and timely. It will be a great step towards meeting the demand in the field of AI. I expect this demand to grow as AI technologies become more integrated into academia, industry and government. I welcome and support the BSAI program at UNO.

Sincerely



Mirosław Truszczyński
Professor Emeritus, AAAI Fellow

To

Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Dr. Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. We anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. We expect these demands to grow as AI technologies become more integral across academia, industry and government. We welcome and support the BSAI program at UNO.

Yours Sincerely,

Paul Tarau, PhD., Professor
Dept. of Comp. Sci. and Eng., University of North Texas
1155 Union Circle #311366 Denton, Texas 76203-5017

UNIVERSITY of SOUTH FLORIDA

May 27, 2024

To
Mahadevan Subramaniam
Professor and Chairperson
Department of Computer Science
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,

With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. AI principles, AI-driven technologies and platforms, ethics, and fairness will play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely and essential. It is a great step towards meeting the demand for AI. We expect these demands to grow as AI technologies become more integral across academia, industry, and government. We welcome and support the BSAI program at UNO.

Sincerely,

Sudeep Sarkar, Ph.D.

Distinguished University Professor and Chair, Computer Science and Engineering

Co-Director, USF Institute for Artificial Intelligence + X

Editor-in-Chief, Pattern Recognition Letters

Fellow of NAI, AAAS, IEEE, IAPR, and AIMBE.

COLLEGE OF NATURAL SCIENCES
THE UNIVERSITY OF TEXAS AT AUSTIN
Department of Computer Science • 2317 Speedway, Stop D9500 • Austin, Texas 78712 -1757 • 512 471-7316

May 20th , 2024

To
Mahadevan Subramaniam
Professor and Chairperson
Computer Science Department
College of Information Science and Technology
University of Nebraska at Omaha

Dear Subramaniam,
With the recent advances in Artificial Intelligence, educating and training a future workforce proficient in its fundamental principles and applications is crucial. I anticipate AI principles and AI-driven technologies and platforms, ethics, and fairness to play a significant and expansive cross-cutting role in higher education across disciplines. The proposed Bachelor's in Artificial Intelligence (BSAI) program by the UNO's Computer Science Department is timely, essential, and is a great step towards meeting the demand in the field of AI. I expect these demands to grow as AI technologies become more integral across academia, industry, and government. I welcome and support the BSAI program at UNO, and I expect graduates from the program to be perfect candidates for the first-of-its-kind Online Masters in AI (MSAI), which we run at UT Austin.

Yours Sincerely,

Peter Stone

Dr. Peter Stone
Professor
Department of Computer Science
The University of Texas at Austin