

NEXT GEN **AI** STUDIO

Explore AI with Next Gen AI Studio - a hands-on learning academy where students build real-world intelligent apps and solutions, develop an entrepreneurial mindset, and connect with Omaha's innovation and startup community.



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About NEXT GEN AI Studio

Artificial Intelligence (AI) is transforming industries - from healthcare and education to business and the arts. The NEXT GEN AI Studio is a 6-week immersive learning experience designed for students to explore the world of AI and entrepreneurship through hands-on projects, expert mentorship, and real-world tools.

Hosted at the University of Nebraska at Omaha (UNO), the program empowers students to move from curious learners to confident AI creators and innovators. Through collaborative sessions and guided experimentation, participants explore how AI can fuel creative ideas, address real-world challenges, and open doors to entrepreneurial opportunities.

Led by UNO's AI researchers, educators, and members of Omaha's startup ecosystem, this academy offers a supportive and engaging environment for students to discover the power, potential, and market possibilities of artificial intelligence.

Who Is This Program For?

The NEXT GEN AI Studio is designed for students who are eager to explore the world of Artificial Intelligence and entrepreneurship - regardless of their technical background. Whether you are a budding coder, a creative thinker, an aspiring entrepreneur, or simply curious about emerging technologies, this program is built to meet you where you are.

This program is ideal for students who:

- ✓ Are preparing for college and want to stand out with real-world experience
- ✓ Are curious about how AI and entrepreneurship intersect to create new opportunities
- ✓ Want to build intelligent tools and applications that solve real world problems .
- ✓ Enjoy creative, hands-on learning and team work
- ✓ Want to explore how AI can power their passions - from science and sports to music, business, and innovation



Program Overview

The NEXT GEN AI Studio is a 6-week summer learning academy designed to introduce students to the fast-evolving worlds of Artificial Intelligence and entrepreneurship. Students engage in in-person and live Zoom sessions at the University of Nebraska at Omaha, blending academic learning with creative problem-solving, innovation, and collaboration.

Unlike traditional classes, this program emphasizes exploration, experimentation, and building. Participants interact directly with real AI tools and frameworks, guided by university mentors, AI engineers, and members of Omaha's entrepreneurship ecosystem.

Each session builds confidence through hands-on activities that spark curiosity, encourage critical thinking, and inspire entrepreneurial creativity. Structured over multiple weeks, the studio balances instruction with project time and offers a supportive environment where students can freely explore how AI and entrepreneurship can power their ideas, passions, and future pathways.

Use AI not just to build apps, but to tell your story — in projects, portfolios, and standout college essays.

What You'll Build & Learn



Explore Generative AI

Learn how ChatGPT and LLMs work through guided prompts.



Learn about AI Agents

Understand how agents make decisions and perform tasks autonomously.



Design AI Pipelines

Automate intelligent workflows using no-code tools.



Build Real AI Projects

Apply AI to solve problems you care about - sports, music, medicine & more.



Develop Entrepreneurial Thinking

Discover how to turn your AI ideas into viable solutions. Learn how to identify market needs, pitch your concept, and explore opportunities to launch your project through Omaha's startup community.



Present & Showcase

Showcase your project and get expert feedback from UNO mentors and local innovators.

Learning Outcomes

AI Literacy for the Future

Gain a foundational and practical understanding of how AI and large language models (LLMs) are transforming industries. Learn to use AI tools hands-on, and understand why ethical, responsible use is essential for tomorrow's leaders.

Problem-Solving Mindset

Develop advanced computational and critical thinking skills by tackling open-ended challenges, collaborating on real-world projects, and iteratively designing and testing AI-powered solutions.

Responsible AI Awareness

Understand and apply principles of privacy, bias mitigation, fairness, and responsible AI design. Learn to implement technical and ethical guardrails in AI systems to ensure safe, trustworthy, and inclusive solutions.

Real-World Readiness

Build confidence in deploying modern AI tools and workflows - such as RAG systems, workflow automation, and agile project management - mirroring what's used in professional environments and higher education.

Communication & Collaboration

Enhance teamwork and presentation skills by pitching projects, participating in peer programming, receiving mentor feedback, and iterating based on critique. Learn to communicate complex AI concepts clearly to diverse audiences.

Entrepreneurial Thinking

Discover how AI can help address real-world challenges. Learn how to turn your idea into a working prototype, explore pathways for commercialization, and connect with Omaha's entrepreneurship ecosystem.

Curriculum at a glance

1

Orientation: Entrepreneurship – AI & LLM Foundations

- ✓ Learn the basics of AI & Machine Learning with real-world questions like “Is a chess engine AI?”
- ✓ Build your own model using Teachable Machine
- ✓ Explore how Large Language Models (LLMs) work, including tokens, temperature, and top-p sampling
- ✓ Practice prompting patterns through creative tools like meme and podcast generators
- ✓ Connect AI to Entrepreneurship, explore how AI can drive innovation, create value, and open pathways for turning ideas into real products and ventures.

2

Introduction to RAG & Guardrails

- ✓ Understand the limitations of standard LLMs (hallucinations, data cutoffs)
- ✓ Learn why Retrieval-Augmented Generation (RAG) is needed
- ✓ Explore chunking, splitting, and data retrieval techniques
- ✓ Discuss ethics and guardrails in AI.
- ✓ Hands-on: Implement guardrails using n8n



3

No-Code & Automation Tools



Dive into Bubble.io for building apps without coding



Learn REST API basics and how to integrate with Zapier



Participate in a mini-buildathon to apply your skills



Deep-dive into n8n for workflow automation



Live project builds and collaborative activities

4

Project Ideation , Agile Development & Early Pitch



Ideate and define project requirements



Experience a college pathfinder run-through



Prepare and deliver your first public pitch in front of an audience of mentors and peers



Receive live feedback to refine your concept and presentation skills



Introduction to Agile methodology and sprint planning



Learn system architecture and cost estimation



5

Development, Testing & Refinement

- ✓ Translate your concept into a working prototype.
- ✓ Participate in coding sprints, apply testing frameworks, and attend office hours for expert guidance.
- ✓ Refine your app through feedback and collaboration.

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Deployment , Demo Day & Beyond

- ✓ Deploy your project to a live production environment
- ✓ Attend final office hours for last-minute support
- ✓ Present your project on Demo Day in front of mentors, peers, and community members
- ✓ Receive expert feedback and celebrate your achievements
- ✓ Explore entrepreneurship opportunities to further develop or commercialize your project through Omaha's startup ecosystem
- ✓ Participate in the program wrap-up and discuss your next steps as an AI creator and innovator

Tools & Platforms Used



AI Experts



Mahadevan Subramaniam, Ph.D.
Department Chair
Computer Science



Prashanti Manda, Ph.D.
Associate Professor
Computer Science



Chun-Hua Tsai Ph.D.
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Join the journey. Shape tomorrow.



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