Peyton Comer

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Deliberative – Restorative – Relator – Achiever – Learner

Education

University of Nebraska – Lincoln *Graduated May 2025*

Major: Computer Science | Honors Student | Accelerated Masters Student | **Minor:** Music Technology

- Cumulative GPA: 3.896
- Undergraduate Research Assistant in Machine Learning and Data Science, Course Leader and Developer

Experience

Research Assistant *August 2023 – Present*

University of Nebraska-Lincoln – College of Engineering | Prof. Qiuming Yao | Lincoln, Nebraska

Utilized advanced machine learning algorithms for the analysis of genetic sequences. Collaborated on creating a scalable web application using Python, Flask, Docker, and AWS for genomic data visualization. Leveraged Facebook ESM models and plotly for enhanced insights and data interpretation.

Computer Science Course Leader *January 2024 – May 2025*

CSCE Department | University of Nebraska – Lincoln |Lincoln, Nebraska

Promoted after demonstrating leadership and innovation in helping students grasp core computer science concepts. Managed, mentored, and coordinated a team of Learning Assistants, ensuring student engagement and curriculum success.

Skills

Full Stack Development | Python | TypeScript | Web Development |Agile | SQL | Flask | React | Collaboration | CSS

Projects

UNL Raikes Design Studio – Tenaska Flow Tracker (Typescript, React, C# .NET, SQL) *September 2024 – May 2025*

For my senior capstone, I was part of the Raikes Design Studio after being selected as an associate through a competitive interview process. I served as a developer on a highly collaborative 5-person team that built a full-stack web application for Tenaska. Following agile methodologies, I deepened my understanding of frontend development using TypeScript, SCSS, and React, as well as developed skills in SQL and .NET API development.

Hack Midwest – DoppelHanger Project (Django, React, Pinata, SQL, Torch) *September 2024*

As a part of the annual Hack Midwest Hackathon, I contributed to the creation of a machine learning-driven outfit recommendation engine, using Torch, Pinata, and SQL. Developed a full-stack solution with a React frontend and Python/Django backend, demonstrating cross-functional collaboration and innovative AI integration.

NASA SUITS Project (C#, Unity) *September 2022 – May 2023*

As a part of the annual NASA Suits challenge, I contributed to the development of a cutting-edge augmented reality interface using C#, Unity, and NASA APIs on the HoloLens 2. Focused on real-time data processing for astronaut efficiency and environmental responsiveness in high-stakes conditions. The team used modern software engineering practices with a focus on agile methodologies.

Extracurriculars

- Founder of the UNL Indoor Percussion Ensemble (Spring 2025)
- Cornhusker Marching Band Drumline *(August 2022 – December 2024)*
- Lincoln Christian South Percussion Instructor *(May 2024 – December 2024)*
- Madison Scouts Drum and Bugle Corps *(December 2023 - August 2024)*
- Crossroads Indoor Percussion *(December 2023 - April 2024)*