

William Foster

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EDUCATION

University of Wisconsin-Madison | Madison, WI

May 2026

Bachelor of Science: Computer Science, Data Science

Coursework: Discrete Mathematics, Linear Algebra, Calculus 1, 2, & 3, Data Modeling 1 & 2, Algorithms

Extracurriculars: Member of the Data Science Club and National Alliance on Mental Illness (NAMI-UW)

EXPERIENCE

Lean Snapshot - Software Developer

July 2024 - September 2024

Full stack

- Collaborated closely with CEO and Founder to lead the development of a comprehensive application for the venture studio.
- Designed and implemented both front-end and back-end components of the application.
- Developed an AI helper, enhancing user interaction by addressing questions related to the application.

Quanta - Software Engineer Intern

May 2024 - Present

Frontend Development & AI Pipeline

- Built an AI engine using a RAG (Retrieval-Augmented Generation) pipeline to process over 10,000 PDFs containing financial data points.
- Developed a secure, fully authenticated web app frontend.
- Enabled work teams to more efficiently analyze data and make informed decisions in their workplace.

PROJECTS

Fazah - Python Library

April 2024 - May 2024

- Created and published a Python library to improve LLM performance with less-known languages.
- Implemented an intermediary system that translates non-English prompts to English, processes them, and returns translated results.
- Utilized the extensive English data online to enhance LLM response quality for users of different languages.

LungVision - X-Ray Classification Model

October 2023 - January 2024

- Created a convolutional neural network model achieving 97%+ accuracy in diagnosing multiple lung conditions from X-ray images including healthy lungs, COVID-19, bacterial pneumonia, viral pneumonia, and bronchitis.
- Augmented the data to enhance the model's accuracy and generalization capabilities

LEADERSHIP & INVOLVEMENT

MadData Hackathon Winner | UW-Madison

January 2024

- Developed "Badger+," an app for UW-Madison students, utilizing the Canvas API and database of nearly 1,000 clubs and over 9,000 classes for personalized academic advice.
- Incorporated OpenAI's language model for answering schedule and campus-related inquiries.
- Engaged in innovative problem-solving, teamwork, and effective project management during the 24-hour hackathon.

Pioneer High School Leadership Award | Ann Arbor, MI

2022

- Recognized for exceptional leadership, initiative, and integrity, in both academic and extracurricular settings.

SKILLS & INTERESTS

Technical: Java, Python, R, JavaScript, CSS, HTML, React, React Native

Cloud Technologies: Firebase, Google Cloud, Azure

Interests: Sports, Machine Learning, Big Data, Artificial Intelligence, RAG