

Monisha Krothapalli

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EDUCATION

University of Pennsylvania, School of Engineering and Applied Sciences, Philadelphia, PA

May 2027

Candidate for Bachelor of Science in Engineering (B.S.E.) in Computer Science (Concentration in Artificial Intelligence)

Relevant Coursework: Data Structures & Algorithms, Computer Systems, Linear Algebra, Statistics, Big Data Analytics, Databases

Organizations: Women in Computer Science (Advocacy Committee)

TECHNICAL SKILLS

Programming Languages: Java, C#, Python, Rust, OCaml, C++, C, Assembly, HTML/JS/CSS, SQL, TypeScript

Frameworks/Tools: Node.js, Flask, React.js, React Native, WebAssembly, PyTorch, TensorFlow, REST API, PostgreSQL, Azure, AWS

PROFESSIONAL EXPERIENCE

The Daily Pennsylvanian, Philadelphia, PA

Business Analyst

Sep 2024 – Present

- Optimize an LLM to create SEO-friendly URL slugs and tags to boost article traffic and conduct A/B testing.
- Develop an automation to gather popular headlines from various publications to generate data-driven content pitches.

Quadrant Technologies, Redmond, WA

Software Engineering Intern

Jul 2024 – Aug 2024

- Developed an ETL pipeline for managing datasets with SQL services under the Cloud and Infrastructure team.
- Built CI/CD software release pipelines with implemented cloud security measures using Azure services.
- Engaged with experts on generative AI modules and contributed to end-to-end LLM projects using open-source models.

Develop For Good, Remote

Product Manager

Nov 2023 – Feb 2024

- Managed a team of six developers to design an app for our client that recommends STEM programs to students.
- Directed the team through the entire process from user interviews to creating low/high-fidelity prototypes with Figma.
- Led over 15 client and internal team meetings and ensured successful project delivery from start to finish.

KEY PROJECTS

MixEngine, <https://github.com/mkro298/MixEngine>

Tools – Python, Numpy, Pandas, Scikit-learn, Flask, React

- Engineered a recommendation engine that generates personalized playlists by analyzing a user-selected track.
- Leveraged the Spotify API for song retrieval, user authentication, and playlist creation in users' accounts.
- Implemented a ML content-based filtering algorithm to recommend songs from 1M+ tracks using audio features.

TextTrove, <https://github.com/mkro298/TextTrove>

Tools – Python, Flask, React, REST API, Transformers

- Developed an AI study tool that processes textbook PDFs to generate chapter summaries using Transformer models.
- Created Q&A flashcards through a text-to-text generation pipeline and implemented a REST API for the frontend.

Brush, <https://github.com/mkro298/Brush>

Tools – Rust, HTML/JavaScript/CSS, Node.js, WebAssembly

- Collaborated with four students to create a programming language called Brush, designed to simplify digital art creation.
- Coded an interpreter and compiler for Brush syntax in the backend using Rust and built an online IDE.

LEADERSHIP

Girls Who Code Club at Tesla STEM High School, Redmond, WA

Chapter Founder and President

Sep 2020 - Jun 2023

- Taught coding languages such as C++, Python, and Java and worked on building personal projects with 15+ members.
- Hosted college panels, invited guest speakers, and organized middle school coding workshops with 30+ participants.