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, Databases, Linear Algebra, Statistics, Calculus III

***Organizations*:** Women in Computer Science (Advocacy Committee)

TECHNICAL SKILLS

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

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

PROFESSIONAL EXPERIENCE

The Daily Pennsylvanian, Philadelphia, PA

Business Analyst *Sep 2024 – Present*

- Optimize an LLM to generate URL slugs and tags to boost online article discoverability and traffic.
- Build web-scraping automation to extract headlines and generate content pitches, increasing efficiency by 2 hrs/week.
- Analyze over 20+ years of ad revenue data to optimize pricing models by incorporating factors such as holiday periods.

Quadrant Technologies, Redmond, WA

Software Engineering Intern *Jul 2024 – Aug 2024*

- Developed an ETL pipeline for managing datasets and CI/CD software release pipelines using Azure services.
- Collaborated with and mentored under cross-disciplinary experts across the Infrastructure and Data Engineering teams.

Develop For Good, Remote

Product Manager *Nov 2023 – Feb 2024*

- Directed a team of 6 developers to design an app for our client that recommends STEM programs to students.
- Engaged directly with customers through in-depth user interviews to understand their needs and preferences.
- Led over 15 bi-weekly client and internal team meetings and guided the team in creating low/high-fidelity prototypes.

KEY PROJECTS

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

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

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

FosterLink, https://github.com/mkro298/FosterLink

Tools – React, Python, Flask, SQL

- Developed FosterLink, a site for former foster kids to support each other, with a small team and Casey Family Programs.
- Programmed real-time forum features such as posting, commenting, and upvoting to create a community.
- Implemented security features in our relational database via encryption algorithms to protect user information.

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

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

- Designed and developed Brush, a programming language created to simplify digital art creation, with 4 other students.
- Coded an interpreter and compiler for Brush syntax in the backend using Rust and built a fully functional 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 to 15+ members and organized college panels and coding workshops with 30+ participants.