

# 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 a scalable LLM to create SEO-friendly URL slugs and tags to boost article traffic for the editorial department.
- Develop a web-scraping automation to extract relevant headlines to generate data-driven content pitches.

**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 DevOps, Data Engineering, and AI 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 personalized playlists by analyzing a user-selected track.
- Implemented a ML content-based filtering algorithm to recommend similar songs from 1M+ tracks using audio features.
- 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 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.