Ava Hajratwala

(734) 883-2944 | avahajr@gmail.com | LinkedIn | avahajr

Summary

Recent Columbia graduate and proven leader passionate about learning new tech stacks and leveraging AI technologies to solve complex challenges. Seeking software engineering and project management opportunities to drive innovation and enhance user experiences.

Education

Barnard College, Columbia University — New York, NY
Bachelor of Arts in Computer Science — *Sept. 2021 – Dec. 2024*
Selected courses: Design for Generative AI, Entrepreneurship, NLP — **GPA: 3.8/4.0**

Skills

Languages: Python, Java, JavaScript/TypeScript, C, C++, C#, SQL (MySQL), HTML, CSS, Haskell
Frameworks: React, Node.js, Flask, JUnit
Developer Tools: Git, Docker, VS Code, Postman, PyCharm, IntelliJ
Libraries: jQuery, NumPy, OpenCV, pandas, Matplotlib, WebAudio

Experience

Full-stack Developer — Sept. 2024 – Present
WBAR Radio — *New York, NY*

- Developed a scalable REST API in Node.js with MySQL, enabling real-time access to radio show schedules, archives, and DJ information for over 500 users.
- Designed and deployed a relational database from scratch, replacing hardcoded data and streamlining data management, which improved scalability and reduced manual updates.
- Translated wireframes into reusable, dynamic React components, enhancing the user interface and accelerating feature development by 20%
- Designed a role-based permissions system in the database, allowing DJs and executive board members to securely manage their content, enhancing workflow efficiency and user autonomy.

Undergraduate AI Research Lead — May 2024 – Present
Soros Lab, Barnard College — *New York, NY*

- Promoted to team lead in 3 months for strong leadership, organization, and communication skills
- Secured a $6,000 grant to work on a team developing novel genetic algorithms in Python
- Cut approx. 10 hours per week of test runtime by parallelizing experiment trials
- Mentored 3 teammates in Git and GitHub, improving team collaboration and version control practices.
- Presented findings in a poster session to more than 50 academics and industry leaders, showcasing summer work and initiating discussions on future collaboration opportunities.
- Currently writing a technical paper to submit to the GECCO conference in January 2025

Projects

Privacy Policy Helper | *Python, Flask, React, Git* — Sept. 2024 – Present

- Built a full-stack web app to help users evaluate privacy tradeoffs using OpenAI's chat API
- Conducted testing on 10 users to refine technical prototype, increasing user satisfaction by 30%
- Built a webscraper to retrieve a privacy policy by company name and increase model accuracy
- Processed GPT output using fuzzy search to cite sources in the model's response to increase user trust in the model's answer

Flight Simulator | *C++, Arduino, Unity, Serial, Fusion360* — Apr. – May 2024

- Developed a custom USB-C protocol for ESP32 to control a virtual plane in the Unity game engine
- Processed analog sensor inputs in real-time to smooth plane handling and decrease crash rate
- Rendered real-time flight feedback to the ESP32 screen to warn pilots of crashes
- Designed and machined a custom protective enclosure for the electronics