Andrew Lu

EDUCATION

Emory University

Bachelor of Science in Computer Science, Minor in Applied Math

August 2022 – Present

Cumulative GPA: 4.0/4.0

- Dean's List: Fall 2022, Spring 2023, Fall 2023
- Relevant Coursework: Data Structures and Algorithms, Computer Architecture, Algorithms, Linear Algebra, Machine Learning, Computational Linguistics, Data Mining, Practicum
- Awards/Distinctions: Phi Eta Sigma Honor Society, National Merit Scholar

WORK EXPERIENCE

Emory Libraries, Computing Center at Cox Hall

Atlanta, GA

Computing Center Technology Consultant

August 2023 – Present

- Maintained a friendly environment by managing CCCH's A/V system, ensuring a seamless experience for students and faculty.
- Provided a secure and up-to-date online experience for over 200 students by servicing CCCH's 32 computers and 4 printers, ensuring reliable access to technology resources.

Kerygma Digital Remote

Software Engineer

June 2023 – July 2023

- Improved service responsiveness by implementing a custom configurable time-to-live HTTP cache, reducing response latency by 60% (400 ms) for over 5 million BibleBot users across 60,000+ Discord servers.
- Optimized cache usage by creating custom middleware, decreasing HTML and JSON cache usage by 99% and 39%, respectively, for improved performance.
- Leveraged knowledge in Java, MVC, REST, and Git to quickly adapt and contribute to the C# and ASP.NET framework.

PROJECTS

Personal Website

• Researched, designed, and developed a personal portfolio website to showcase skills and learn front-end technology and design best practices, supporting Project Emory and RIDEmory's front-end/design team.

Technologies: React + Vite, TypeScript, HTML/CSS, Figma, Git, Firefox/Chrome Developer Tools

RIDEmory

- Built a comprehensive rideshare solution for Emory's students, featuring a self-updating database of ride information.
- Guided engineers through MongoDB GeoJSON indexing to filter search for nearby rides and current traffic times, enabling efficient ride matching.
- Utilized Java and Spring Boot to teach MVC/REST principles and promote collaboration within the project's back-end team.

Technologies: Java/Spring Boot, MongoDB Atlas, Python/Flask, React, Figma, Git, Google Maps/Routes API

Voice Calculator

- Developed a hands-free calculator as a proof-of-concept for a lightweight, deployable voice-controlled application.
- Created modular grammar regular expressions to improve speech detection accuracy in noisy environments, ensuring reliable voice recognition.

Technologies: Java, Sphinx4, MaryTTS

EXTRACURRICULARS

Project Emory

Atlanta, GA

May 2023 – Present

Cofounder/Secretary

- Crafted engaging Spring Boot, MongoDB, and Git curriculum to enhance the technical proficiency of over 20 members.
- Provided working CS experience to over 30 students by establishing and running Emory's only open project-building club.
- Mentored 2 CS students through peer-programming opportunities, coursework guidance, and pre-professional advice, contributing to their overall success in software engineering.

 ${\bf Emory\ Hack 4 Impact}$

Atlanta, GA

Software Engineer December 2023 – Present

• Designed and developed an internal operations webpage for Odyssey Family Consulting Center, including an announcements board, HR service page, personal dashboard, and resources page, providing a unified employee experience.

• Leveraged Figma for designing pages based on client specifications and JavaScript for implementing the designed pages.

ADDITIONAL INFORMATION

Software: (proficient): Java, Git, JavaScript/TypeScript, HTML/CSS, Python, (familiar): Shell, C, C#, Go Interests: Backpacking, Volleyball, Technical/Modded Minecraft, Linux, Performance Arts (Oboe and Guitar)