

ANDREW ROBERTS

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Experience

Out There Events

Newark, DE

Technical Founder & Software Engineer

December 2024 – Current

- Spearheaded development of the platform using SolidJS, establishing a scalable foundation for growth
- Conducted market research through industry conferences to validate market need & refine product direction
- Defined product vision and strategy & organized team for early-stage development

FNDRSNG

Newark, DE

Lead Software Engineer

June 2024 – November 2024

- Led design & development of custom web application providing donation forms for nonprofits
- Integrated application with CRMs & Revere Payments providing seamless user experience
- Utilized TypeScript & Firebase to ensure application robustness & scalability

Lutron Electronics

Austin, TX

Embedded Software Engineer

May 2023 – August 2023

- Modified firmware of Silicon Labs development board to enable Openthread data transfer
- Developed C# module for transmitting device firmware to embedded lighting products
- Built C# application to restore firmware of bricked devices recovering over 400 devices
- Conducted reliability testing on firmware restoration tool completing over 1000 tests

Citigroup

Tampa, FL

Software Developer Analyst

June 2022 – August 2022

- Collaborated with team to develop & deploy Angular application using Docker & Jenkins
- Developed internal Angular component to replace AG Grid reducing annual costs by \$80k
- Showcased proficiency in industry software including Angular, Docker & Jenkins

Projects

Pre-hash Authentication

March 2025

- Co-developed a novel Chrome extension redefining secure password practices & enhancing user experience
- Eliminated password storage & transmission by leveraging per-site cryptographic salting during authentication
- Collaborated with three engineers to design, build, and launch MVP

JAN Compiler

Spring 2024

- Collaborated with 2 peers to design a minimal, strongly-typed programming language
- Built compiler that can target web assembly or RISC-V assembly builds
- Conducted extensive testing using Vitest with over 360 test cases achieving over 99% code coverage

Investment Insights

March 2024

- Developed a market paper trading platform for users to simulate investments & learn about stock market
- Leveraged AI to provide educational insights & summaries of complex market data for novice investors
- Demonstrated rapid prototyping and team collaboration developing with 3 peers

Home Server

Fall 2023 - Current

- Implemented containerized service manage using Docker & Docker Compose
- Configured security rules, reverse proxy & update automation enhancing server security
- Actively maintain reliability & uptime of services for several active users

Roommate Expense Tracker

Spring 2022

- Developed TypeScript backend for tracking shared roommate expenses
- Implemented WebSocket and REST API endpoints for real-time data updates
- Integrated MySQL database & designed robust schema to store & manage user & expense data

Education

University of Delaware

Newark, DE

B.S. Computer Science (Systems & Networks), Minor: Cybersecurity, GPA: 3.7

January 2021 – December 2024

- **Relevant Courses:** Computer Architectures, Compiler Design, Operating Systems, Parallel Computing, Computer Networks, Webapp Security, Cloud Computing Security, Algorithms, Automata Theory, Data Structures, Systems Programming
- **Involvement:** UD Capture The Flag (cybersecurity/hacking), Association for Computing Machinery (ACM)
- **Achievements:** Henhacks 2023 Hackathon Winner

Skills & Technologies

Skills: C/C++, Python, JavaScript, TypeScript, C#, Embedded Software Engineering, Firmware Development, Computer Networking, Java, PHP, HTML, ARM & RISC-V Assembly Language, SQL, CUDA, Penetration Testing

Technologies: Docker, React, Wireshark, Google Cloud (GCP), Firebase, Apache, Nginx, MySQL, Virtual Machines