ANDREW EGGLESTON

Software Engineer

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andreweggleston



WORK EXPERIENCE

UMass Lowell

Undergraduate Researcher

Working under Prof. Anitha Gollamudi extending LLVM to target Trusted Execution Environments (TEEs) like **Intel SGX** and **arm TrustZone**. Working with LLVM codebase in C++ on intrinsics and optimization passes supporting enclaves. Stated goal is to target the OpenEnclave SDK so that security-annotated LLVM IR can be ran on SGX and TrustZone.

May 2024 - Present

♦ Lowell, MA

Genelec Inc.

Technician

Creating tools to streamline shipping procedures. Managing network architecture to support **Dante** networking protocol with DHCP and mDNS. Testing software which managed DSP calibration hardware installed in speakers.

March 2020 - May 2024

♥ Natick, MA

Open Avenues Foundation

Student Consultant

Completed a software development industry project at thirdweb. Gained a strong conceptual understanding of blockchain principles, specifically **Ethereum** and the **EVM**. Used **Solidity** to complete a series of programs, culminating in a self-directed project. I made a tictactoe game where players can wager eth on who will win the game.

Northrop Grumman

Software Engineer

Created an employee management database. Gained experience in Java EE, angular.js, and SQL. Utilized Agile software development process to organize tasks.

June 2019 - August 2019

Paltimore, MD

PROJECTS

Death By Dagger

github.com/andreweggleston/DeathByDagger

A game resembling 'Senior Assassin,' updated for the electronic age. Made use of the **Slack API** to keep players updated on their status in the game. Created using **Go**, with data hosted on **PostgreSQL**.

OxiDish

github.com/andreweggleston/OxiDish

A CRUD app to store recipes, queryable by ingredients. Great for figuring out what you can make with ingredients in your fridge. This is just the backend, written in **Rust** with the **Axum** web framework and **sqlx**. Currently developing a **Vue** frontend.

SUMMARY

Software engineer who is an eager learner. Looking to gain experience in the field. Enjoys deep dives into systems and understanding what makes a performant solution.

Fascinated by CS foundations and interactive theorem proving!

SKILLS

Languages

Java Go C Python

Tools

Linux git Bash SQL/OracleDB Docker/laC

COURSEWORK

Operating Systems Computer Architecture & Assembly Organization of Programming Languages

EDUCATION

UMass Lowell

BS in Computer Science

MassBay Community College

AS in Computer Science

ACTIVITIES

MassBay ACT CyberRange

Student Worker

🛗 January 2022 - Present

Managing a cluster of Xen Hypervisor machines used to host virtual labs (a Cyber Range) for Cyber Security and Computer Science students

AWARDS

Dean's List

MassBay

