

EDUCATION

Georgia Institute of Technology

Atlanta, GA

B.S. in Computer Science, Major GPA: 4.0

Aug 2018 – May 2021

- **Concentrations:** Computer Architecture & Embedded Devices
- **Selected Coursework:** Data Structures & Algorithms, Computer Organization, Objects & Design

EXPERIENCE

Google

Sunnyvale, CA

Incoming Software Engineering Intern

May 2019 – Aug 2019

- Work to extend Node.js' support for WebAssembly, for use in Google Cloud Platform

Rolltrax — Attendance Management Services

Atlanta, GA

Founder, Software Engineer

Nov 2017 – Present

- Created attendance management system for student interns, utilized by North Springs High School since 2018
- Designed user-customizable dashboard for teachers to monitor attendance analytics and statistics
- Used Crystal, ReasonML, React and Postgres to implement the second revision of the website and backend
- Created two mobile applications for teachers and students using Dart and Flutter
- Implemented badge scanning system using Python and Qt framework

Fulton County Schools

Atlanta, GA

I.T. Intern

May 2016 - May 2018

- Created county-wide kiosk system in OCaml and Ruby for student device technical support
- Utilized ServiceDesk and Destiny APIs to interface kiosk with existing county systems
- Used penetration testing methods to help secure network used by over 94,000 students
- Assisted in preparing and monitoring network infrastructure for over 100,000 concurrent student/faculty devices

PROJECTS

- **Revery:** Serving as a main contributor to Revery, a GUI framework for ReasonML attempting to bring Electron's ease-of-use to a native, cross-platform environment.
- **Quartz:** Designed and began implementation of a programming language for concurrent programming, targeting the Erlang/BEAM Virtual Machine and utilizing a novel algorithm to infer and type-check session types in distributed message-passing programs.
- **Nanocaml:** Designed and implemented a PPX-powered nanopass compiler framework for OCaml.

EXTRACURRICULARS

- **HackGT Operations Team:** Working with a small team to plan and execute HexLab workshops and "hack nights." Participating in the planning process for the HackGT hackathon in the Fall.
- **North Springs Hack Club:** Served as president for 2 years, focusing on teaching Scheme and JavaScript programming and successfully planning our first-ever SpartanHacks 24-hour hackathon in April 2018.
- **Future Business Leaders of America:** Competed at national and state levels for a variety of technology-based events and served as club treasurer during senior year. Helped grow our chapter to over 400 members, bringing it to Big 10 status in the Southern Region as well as Gold Seal status nationally.

AWARDS

- **FBLA Coding & Programming:** Received 1st place in Georgia for a "family entertainment center" application built to manage payroll, employee data, and customer statistics using F# and WPF.
- **FBLA Desktop Application Development:** Received 2nd place at Nationals for an F# application designed to help store and manage FBLA chapter records.

SKILLS

Languages: OCaml/Reason, Java, Ruby, F#, C#, Dart, Scheme, JavaScript/ES6, C, Haskell, Python, Prolog

Technologies: Functional Programming, OOP, Linux, Debian, NixOS, SQL, React, Google Cloud, Flutter

Interests: Compiler Design, Systems Programming, Quantitative Finance, Hip-Hop, Cooking