

---

## EDUCATION

---

### Georgia Institute of Technology

*Incomplete B.S. in Computer Science with a minor in Mathematics, GPA 3.31*

- Thread selection in Devices and Systems & Architecture

### The University of North Carolina at Charlotte

*Freshman year studying Computer Science with a minor in Mathematics, GPA 4.0*

Atlanta, GA

Aug 2019 - Spring 2020

Charlotte, NC

Jul 2018 - May 2019

---

## RELEVANT SKILLS

---

- C/C#/C++, Java, Python, Swift, PHP, Javascript, Objective-C, Rust, Haskell, Bash
- SQL, MongoDB, REST APIs, ReactNative, NodeJs, MariaDB, \*nix Systems, GraphQL, UI/App Kit, SwiftUI

---

## EXPERIENCE

---

### Barrel Proof Apps

*Independent Contractor*

- Built and maintained infrastructure to meet the demands of clients
- Utilized React Native, MongoDB, and NodeJs to build an inspection utility app used by QI2

Atlanta, GA

Aug 2020 - Nov 2020

### SameTunes - sametunes.com

*Fullstack Developer, Interim CTO*

- Migrated an existing codebase to a type-safe MVVM architecture
- Increased speed, stability, and code uniformity while decreasing duplication, database calls, and page load times
- Built and implemented a caching engine that has stored over 15 million items to reduce Spotify's rate limiting
- Designed a majority of the APIs, frontend pages, and backend logic used throughout the entire platform today

Atlanta, GA

May 2020 - Nov 2020

### Kabbage

*Mobile iOS Engineer Intern*

- Studied and implemented a GraphQL middle layer between the client application and backend
- Reverse engineered a third party Framework to directly interact with a REST API for credit card processing and payments
- Designed and updated a majority of the frameworks and views used in the "Payments" portion of the app

Atlanta, GA

Jun 2019 - Dec 2019

### Trafficlight

*Co-Founder, President, Head iOS Developer*

Charlotte, NC

Jul 2017 - Nov 2019

### Culturebase

*Mobile iOS and Backend Engineer*

Atlanta, GA

Dec 2018 - Jul 2019

---

## PROJECTS

---

### Hunger Games - a REST server that analyzes RTSP video streams to determine line length

- Utilized OpenCV to detect and abstract the movement of people between multiple video streams
- Built and deployed a REST API onto an AWS for front-end consumption
- Lead team over three days from start to finish developing a REST backend, iOS client, and web client

### Title Timer - a MacOS title bar program to track time spent on applications and user defined tasks

- Parsed output from bash to display processes' name, uptime, and locate icons
- Used UTC timestamps and UserDefaults to track time without impacting system resources

### HyperSwift - a Swift DSL to build dynamic HTML pages styled by CSS currently generating my personal website

- Used internal Swift features, like function builders, to create a powerful and dynamic API interface

### Ping++ - an implementation of ping in C++ from scratch

- Read through the Linux source code and headers to implement ICMPv4 and 6 echoing and receiving
- Successfully implemented the majority of features that the POSIX ping binary provides

---

## CLUBS/AWARDS

---

**MLH Local Hack Day 2018** - Awarded "Best Hacker Community Project" for an iOS application solely developed (Jottr)

**HackCLT** - Placed 2nd in "Best Hack" for anonymizing, filtering, and displaying patient data through heatmaps

**CodeNine** - Taught fellow club members introductory iOS development and penetration testing

**Game Developers** - Learned effective methods for identifying, meeting, and shaping users' needs and behaviors

**ISACA (Information Systems Audit and Control Association)** - Developed skills to audit and secure networked systems

---

## INTERESTS

---

Rugby, Reverse Engineering, Pebble Watches, Kernels, Compiler Theory, Vintage Computing, Jailbreak Development