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## EDUCATION

## University of North Carolina at Chapel Hill

Bachelor of Science in Computer Science

Chapel Hill, NC Aug 2019 – May 2022

#### EXPERIENCE

Microsoft Redmond, WA Aug 2022 - Present

Software Engineer, Xamarin.iOS/Mac SDK

- Working on an open-source software development kit to enable native Apple application development using .NET
- Published a NuGet library to analyze an application's garbage collector dump to identify circular references and memory leaks caused by the different memory management techniques in .NET vs. Objective C
- Working to integrate Phi-3, a small language model, to decrease latency and improve performance of an inclusive code review browser extension; Optimized custom machine learning model via quantization and fine tuned usage of Open AI API to perform sentiment analysis and suggest improvements to user
- Developed transpiler-like tool to provide customers storyboard editing support via Xcode for .NET apps targeting Apple platforms; integrated the tool into Visual Studio Code extension for enhanced developer experience
- Engineered command line tool that provides intellisense documentation coverage for 20k+ API; responsible for full ownership and maintenance including thread-safe resource management, leveraging the csharp compiler for dynamic assembly analysis, and ensuring tool is optimized and scalable within build constraints

Capital One Plano, Texas

Software Engineer Intern, Financial Services Team

Jun 2021 - Aug 2021

- Developed a full-stack application to remediate manual overhead of managing bulk access requests
- Created front-end for web application using Angular that handles 3,000 requests/month, saves company \$1K in monthly maintenance costs, and helps customers save the effort of 1 full time employee
- Leveraged clients and team to understand requirements for project and create an effective user interface

iD Tech Camps Remote

May 2020 - Aug 2020 Tech Instructor

 Mentored 100+ students ages 7-18 in a dynamic learning environment to create interactive games and custom Mods in Minecraft using Java and JavaScript

## ACTIVITIES

#### **Product Management Club**

Devised a redirection prototype for startup, Subbed; improved efficiency for vendor

# Computer Science & Social Good Club

• Developed mobile application using React Native to help teens cope with mental health issues

### The Daily Tar Heel

- Photographer for the University's newspaper publication
- Used Adobe Lightroom to edit images and Associated Press style for caption guidelines

### PROJECTS

Healthline Won "Best Global Health Hack" at Technica, the world's largest all women and non-binary hackathon; utilized React Native, Firebase, and BigQuery to develop a mobile application that provides health care workers with mental health resources, user authentication, and the latest data regarding COVID-19

SMTP Email Parser Used Python and the fundamentals of networking protocols to create my own implementation of facilitating communication between the client and server to parse data from email messages

#### SKILLS

Languages: Python, C#, Make, Objective-C, Bash, YAML, SQL, Swift, Java, JavaScript, TypeScript, C, Assembly

Tools: Xcode, VS Code, macOS Console, Figma, Vercel...anything I need to solve a problem

Frameworks: .NET, React, Node.js, Next.js, Bootstrap, Bulma, jQuery, Xunit