Alfred Mathew

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EDUCATION

University of North Carolina at Chapel Hill — Chapel Hill, NC
Computer Science (B.S.), Statistics and Analytics Minor; GPA: 3.62/4.00 — *Expected May 2021*

EXPERIENCE

UNC Department of Computer Science — Chapel Hill, NC
Undergraduate Research Assistant — *Dec 2020 - Present*

- Worked on a CDC contract to translate COVID-19 guidelines and research materials.
- The project's goal is to make research and guidelines more accessible to Americans with reading disabilities.
- Served as the Lead Developer for a Google Docs extension that computes advanced readability metrics for researchers as they convert documents to plain language standards approved by the federal government. The extension helps researchers identify areas of the document that need to be simplified.

MetLife Corporation — Cary, NC
Technical Intern — *June 2020 - July 2020*

- Worked alongside Software Engineering teams to improve application performance and efficiency by connecting applications to database, designing efficient schemas, and improving query usage in applications.
- Optimized time-intensive operations by developing PowerShell scripts that automated tasks such as database backup, restore, and reindexing which previously cost team several hours of manual effort.
- Competed with 120+ other technical and business interns and won *Most Popular App Idea* Award for app designed as part of MetLife's annual Innovation Challenge.

UNC - Department of Computer Science — Chapel Hill, NC
Undergraduate Teaching Assistant — *Jan 2019 - Present*

- Provided programming expertise, conceptual understanding, conducted exam reviews, and helped with independent projects for an introductory programming class.
- Organized and mentored students to develop coding skills during an overnight hackathon each semester. Presented workshops geared towards familiarizing students with Software Engineering principles.
- Wrote weekly assignments and study guides to help students deepen their understanding of important programming concepts such as recursion and dynamic programming.

Carolina For The Kids — Chapel Hill, NC
Website Development Chair — *May 2019 - August 2020*

- Used Weebly website editor to fundamentally restructure and redesign the organization's website leading to a 20% increase in monthly visitor traffic year-over-year.
- Designed custom timelines, buttons, and other interactive elements using a combination of HTML and CSS.

PROJECTS

- **Tar Heel Calendar (ReactJS, NodeJS, MySQL):** Created a working calendar application using ReactJS. Provides users with the ability to create and manage events for different days, weeks, and months. NodeJS was used on the server-side with a MySQL backend. Collaborated with a team of three other students to develop this website.
- **Task List (AngularJS, TypeScript):** Built a custom scheduling application that helps users prioritize critical everyday tasks. Used a Priority Queue to implement task list and Bootstrap framework for custom themes. Utilized Angular framework to implement frontend logic.
- **Best Hospitals (SQL Server, Python):** Using CDC Data, created website application to help patients get access to great healthcare. The app provides an assessment of healthcare quality by assessing readmission rates and user reports. Used Python (Flask) to design middle tier and SQL Server for backend.
- **The Airline (Java, Android):** Developed an application in Android Studio that simulates a working airport with multiple airlines. Created a dashboard where users are able to monitor airport traffic, airline finances, and decide which flights need to be prioritized based on the number of passengers and available runways.

SKILLS

- **Skills:** Java, Python, SQL Server, C/C++, AngularJS, NodeJS, ReactJS, MongoDB, HTML, CSS, Javascript, Typescript, Azure DevOps, PowerBI, Excel, Agile