Alfred Mathew

Email: alfmat@live.unc.edu http://alfmat.github.io Mobile: 919-360-3427

EDUCATION

University of North Carolina at Chapel Hill

Chapel Hill, NC

Computer Science (B.S.), Statistics and Analytics Minor; GPA: 3.58/4.00

o Intending to pursue M.S. in Computer Science and graduate by May 2022.

Expected May 2021

Experience

MetLife Corporation

Cary, NC

Technical Intern

June 2020 - July 2020

- Worked for MetLife Database Team on Windows Server 2008 to Windows Server 2016 upgrade.
- o Developed PowerShell Scripts and BAT Files to automate database tasks such as backup, restore, reindexing, and checking databases for performance issues.
- Successfully migrated 100+ databases across development and production environments.
- Setup and monitored maintenance jobs for databases across multiple servers in production and development environments. Used IBM Tivoli Workload Scheduler and SQL Server Agent for job setup and scheduling.
- Gained strong understanding of three-tier architecture model and used it to design and develop applications for MetLife Pet Insurance customers. Designed and connected data tier to application tier.

Department of Computer Science

Chapel Hill, NC

Undergraduate Teaching Assistant

Jan 2019 - Present

- o Provided programming expertise, conceptual understanding, conducted exam reviews, and helped with independent projects for an introductory programming class.
- o 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 - Present

- 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.
- Mentored and directed a team of 6 Computer Science students responsible for the website's maintenance.

Database Programming Intern

Bangalore, IN July 2017 - August 2017

o Created and updated databases in SQL Server and MS Access.

- Wrote efficient queries to join tables and access/update critical customer information.
- Connected applications to databases. Frequently optimized application/database performance wherever possible.

Projects

Logos India

- Best Hospitals (SQL Server, Python; Software Engineering): Using CDC Data, created website 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) as middle tier and SQL Server as data tier.
- The Restaurant (Java; Software Engineering): Simulation of a restaurant in which customers order food and the application intelligently handles orders based on urgency and ease of cooking. Built using Java for backend and Swing API for frontend. Utilized Design Patterns such as Factory, Iterator, and Observer/Observable model.
- The Airline (Java; Software Engineering): Developed an application in Android Studio that simulates a working airport with multiple airlines. User is able to monitor airport traffic, airline finances, and decide which flights need to be prioritized based on the number of passengers and available runways.
- Financial Fraud Detection (Python; Machine Learning): Analyzed a data set from Kaggle containing 100,000+ financial transactions to identify cases of fraud. Used machine learning to generate decision tree model to predict instances of fraud with 93% accuracy.

SKILLS

• Skills: Java, Python, SQL Server, C/C++, HTML, CSS, Azure DevOps, PowerBI, Excel, Agile