Mohammad Nafis Alam

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EDUCATION

University at Buffalo SUNY, New York , Master in Science, Computer Science **GPA: 3.42**   **2023-2025**
(Operating System, Machine Learning, Database System, Deep Learning)

Vellore Institute of Technology, Vellore, India Bachelor of Technology, Computer Science **GPA: 8.76/10**   **2014-2018**
(Worked as Teaching Assistant for Differential Calculus class, Served at Youth Red Cross)

Relevant Coursework: Programming Language Translator, Computer Network, Algorithm Design, Database Management , Differential Calculus , Linear Algebra, Theory of Computation

WORK EXPERIENCE

Optum-UHG Chennai, India **Software Engineering Lead**   **Mar 2023 – Aug 2023**
- Worked on DR Plan and contributed to IAC and minimized RTO

Optum-UHG Chennai, India **Software Engineer**   **Mar 2021 – Feb 2023**
- Worked on a Medical Referral Application enabling integration with EHR, DirectMessage, Faxes.
- Created data streaming pipeline using Redis Stream .NET Client. Facilitated incremental data loading and reduced the workflow duration from 4 hours to a few minutes.
- Built a SearchEngine using ElasticSearch and .NET Client(Relevance Score Customization, Infrastructure and SDKs). Achieved efficient practitioner search with required sequence of results.
- Wrote Angular components for SPA

Optum-UHG Chennai, India **Associate Software Engineer**   **June 2018 – Feb 2021**
- Laid out design in Azure Cloud Infrastructure(Full CI-CD using jenkins pipeline, terraform for IAC).
- Wrote enterprise plugins for Vendor Softwares. Customized Microstrategy authentication libraries to support OAuth2 and multi node architecture and hence reduced RPS.
- Built analytical Microstrategy dashboards to keep a check on referral leakage across clients. and track workflow TAT.

Advisory Board Company Chennai, India **Software Intern**   **Jan 2018 - April 2018**
- Re-designed relationship hierarchy in SQL Database to use as Access Control List.

ACADEMIC PROJECTS

SQL Query Dependency Tree Generation | C#, DotNet, Docker **- 2022**
- Wrote a library, using a composite design pattern, to generate a json payload of an SQL table with all related tables having foreign key relationships. Used this library to stream data associated to an entity by generating query lists to retrieve data based on configured entity dependencies. (https://github.com/nafisdev/Event.Stream)

Insurance Contract Language| C,LLVM IR, MLIR **- 2021**
- Implemented token parsing and dialect detection to execute insurance soft contracts. The executable soft contracts expedited the claim process quicker by automating manual claims inspections process.

Home Automation | Arduino, C, Java, MySQL **- 2017**
- Android Application and ESP8266 based Electrical Switch controller. Wrote arduino code to connect Wifi module to Internet and subsequently get controlled by an android app. The design costs only 150% of conventional electric boards.

SKILLS AND INTERESTS

Certification: Kubernetes Certification from edureka, Data Scientist Certification course on DataQuest (https://app.dataquest.io/view_cert/Q1CMDBGLATN7Q36QSF45/)

Technical Skills: C,C++,C,C#, SQL, Java, Python; SQL;.NET; Angular, TS; Dotnet, Django ;SpringBoot.

Other Skills: SQL Server;Docker;Azure;Kubernetes;Jenkins;Terraform;Microstrategy;ELK;Redis; GraphDB;Design Patterns; SOLID Principles; Agile Methodologies;

AWARDS AND ACHIEVEMENTS

- Google CodeJam 2017 Qualifier
- IIT JEE Advanced 2014 Qualifier(AIR 10846)
- Won Inter-School Math quiz and Coding competition. Represented school in inter-school sports competitions (Archery,Football,Cricket)

LEADERSHIP EXPERIENCE

Optum-UHG Chennai, India **Software Engineer**
- As a member of Optum's Innovation Council, conducted sessions on ElasticSearch. **(https://nafisdev.github.io/elasticsearch/)**
- Built a Django API facade for interns to work on. Taught libraries like DRF serializer to perform CRUD operations.