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

ACADEMIC PROJECTS

Deep Learning based Wireless Localization for Indoor Navigation | Python, Pytorch - 2024(In Progress)

• Implementing neural network design for a research article(dloc).(<u>link</u>) Training model to pick the maximum probability point as the target location.(<u>https://nafisdev.github.io/dloc/</u>)

Anomaly Detection in ElectroCardiogram | Python, Tensorflow - 2023

Trained an autoencoder on the normal rhythms and based on deviations from reconstruction and classified the data.

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.

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.