NAYMUL HOSSAIN

n5hossai.github.io/portfolio — naymulhossain21@gmail.com — in/nay — github.com/n5hossai — (+1) 289 668 8130

SKILLS

- **Languages:** Python, C++, Perl, JavaScript, Typescript, Go, Java, C, R, MATLAB, Bash, SQL
- **Tools:** Git, Docker, AWS, Agile, Jira, Jenkins, Postman, Apache, Dialogflow
- **Frameworks & Databases :** Angular, React, Express, Node.js, MariaDB, MongoDB

EXPERIENCE

Navblue, an Airbus Company   *Optimization, AI and ML Chapter*
Software Developer   Apr 2022 – Present

Engineered AWS services, optimized crew scheduling, managed deployments for new features

- Crafted a robust REST API and web interface with AWS Lambda, EC2, and API Gateway, linking with Bedrock. Utilized S3 for Vector DB storage and applied Retrieval Augmented Generation for contextual queries, enabling swift access across distributed knowledge bases in Confluence, Google Docs, and product manuals, enhancing operational efficiency for all stakeholders.
- Enhanced airline crew scheduling with C++ algorithms, with standby allocation using Mixed Integer Linear Programming and Constraint Programming, boosting reserve coverage by 10%
- Implemented robust software features in C++, Perl, SQL, ensuring functionality. Orchestrated deployments with Jenkins, utilizing RHEL OS and Docker containers for seamless updates.
- Optimized flight crew pairing software, achieving 15% faster processing with code profiling

Competers Inc.
Software Engineer (Full-Stack Engineer)   Aug 2022 – Dec 2022

Developed new features using Node.js while also improving cloud services and scalability in AWS

- Developed and implemented new features in a Node.js environment, utilizing Angular for the front-end and Express.js for the back-end resulting in a 15% increase in user engagement.
- Transformed SOAP microservices into REST APIs utilizing the .NET framework & Test-Driven Development methodology, resulting in a 20% reduction in errors & increased system efficiency.
- Remodeled existing microservices to AWS Lambda functions, tested with the serverless framework which resulted in a 13% improvement in scalability and performance & optimized SQL queries.
- Participated in consistent code reviews and pair programming, resulting in a significant reduction in debugging time, improvement in code maintainability, and team productivity.

bKash Limited
Software Engineering Intern (Backend Engineer)   May 2019 – Aug 2019

Developed features using Django, containerized services, improved scalability and fault tolerance

- Implemented features with Django REST, achieving 11% performance improvement and 15% higher user satisfaction and ensured secure communication with JWT authentication
- Integrated Dialogflow-based bot with Facebook SDK, leveraging AWS ElastiCache for enhanced customer engagement and functionality

EDUCATION

University of Waterloo   Sep 2017 – Aug 2021

Bachelor of Mathematics, Honours Computational Mathematics

Minors: Statistics, Computer Science, Combinatorics & Optimization

CERTIFICATIONS

AWS CCP| Supervised Machine Learning| Django| MEAN Stack(Angular, Node.js)

Projects

Post Feed *(TypeScript, MongoDB, Express, Angular, Node.js)*   shorturl.at/D1356

· Designed a secure post-feed application by implementing Angular in the frontend with ExpressJS
  as the backend framework, utilizing TypeScript for improved type checking and code maintenance
· Deployed a scalable REST API & the Angular app using <u>AWS EBS</u>, featuring error handling,
  authentication, tokenization & pagination for efficient database management using MongoDB

Daily Taskmate *(Python, Django REST, PostgreSQL, Heroku)*   shorturl.at/ckmJP

· Created a task manager web app using Django with user registration and login authentication
· Implemented CRUD functionalities using Django REST & connected the database with endpoints
· Migrated the database from SQLite3 to PostgreSQL and deployed the app live on Heroku