

THANEMUL ISLAM

Full Stack Developer

📞 9294136619 ✉ thanemul.islam@gmail.com 🔗 linkedin.com/in/thanemulislam 🌐 github.com/Thanemul-Islam

Education

Master in Computer Science, Specilization in Artificial Intelligence

Expected Graduation: 2028

Georgia Tech, School of Computing

Bachelor in Computer Science

Graduated: 2025

CUNY Hunter College, School of Arts and Sciences, New York

Experience

Pharmacy Systems Developer

July 2021 – Present

As-Salam Pharmacy and Partners, New York, NY

- Designed and deployed a HIPAA compliant bin tracking system powered by AWS DynamoDB, Lambda, and Cognito, with a React.js front end, allowing staff to scan medication bags and assign them to bins in real time. By enabling secure lookups by patient name or date of birth, the system reduced retrieval time by 40% and boosted prescription handoff accuracy by 30%.
- Engineered an automated prescription pickup tracking tool using PrimeRx data, Python scripts, and Twilio for SMS alerts, allowing real time monitoring of unclaimed prescriptions. This solution reduced shelf waste by 25%, improved pickup compliance, and enhanced inventory turnover accuracy by 18%.
- Designed an automated medication synchronization tool using Node.js, PostgreSQL, and PrimeRx exports, aligning refill schedules for chronic patients. This reduced fragmented pickup schedules by 50% and boosted refill adherence rates by 22%.

Full Stack Developer

September 2023 – September 2024

Art of Wings, New York, NY

- Directed the architectural design of customer queue APIs, Dockerizing legacy systems, and enabling seamless deployment to Amazon ECR via AWS CodePipeline and Lambda, integrated Amazon RDS with PostgreSQL for reliable relational database management, resulting in a 90% scalability boost.
- Spearheaded the implementation of a centralized logging and monitoring system using Amazon CloudWatch, SNS, and custom Lambda alerts, significantly improving incident response times and reducing system downtime by 60%.
- Extended the customer queue API by building an analytics dashboard using React.js, AWS Lambda, and Amazon QuickSight, allowing business owners to visualize queue trends, peak traffic times, and customer throughput, resulting in a 40% improvement in operational planning and resource allocation.

Machine Learning Fellowship

February 2022 – June 2022

Hunter College, New York, NY

- Created a Twitter sentiment analysis tool using Python libraries (NLTK, TextBlob) and PyText for NLP , with a cron job based polling system, aiding investment decisions regarding Dogecoin and increasing portfolio growth.
- Enhanced sentiment analysis accuracy by applying linear algebra techniques, such as matrix factorization, for feature representation optimization, leading to a 30% precision boost compared to traditional bag of words approaches.
- Utilized Matplotlib and Plotly to visualize sentiment trends and model results, aiding in a 20% improvement in decision making accuracy through clearer presentation of sentiment analysis findings.

Projects

CareSync AI Dementia Caregiver Management Platform

- Designed and developed a full stack healthcare application integrating a smart medication dispenser, AI pill scanner, caregiver task log, and automated reminder system to improve medication adherence and daily care routines for dementia patients.
- Built an AI powered prescription onboarding workflow using React.js, Node.js, Express, MongoDB, and OCR/NLP models that reads prescription labels to identify medications, extract directions, detect quantities/refills, and automatically generate dosage schedules for caregivers.
- Engineered a real time caregiver dashboard with React, Tailwind CSS, Twilio/Firebase notifications, and AWS/Docker infrastructure to track completed tasks, send missed-dose alerts, and coordinate care across multiple caregivers.

SilentZone - Geofenced Phone Automation App

- Designed and developed a cross-platform mobile app (iOS/Android) using React Native and Expo that lets users mark real world locations as "silent zones" on an interactive map, architecting a platform aware automation model that accounts for each OS's native capabilities and restrictions around notification/ringer control.
- Built an interactive geofencing and zone management system using React Native, Expo Router, react native maps, and AsyncStorage enabling users to drop map pins, configure custom trigger radii, and persist/edit/delete saved locations through a dedicated CRUD interface with no backend dependency.
- Extended the geofencing engine with calendar aware and schedule based automation rules using expo calendar to detect meetings/events and custom time window matching logic layered into the Zone data model enabling zones to auto trigger during scheduled hours or calendar events independent of physical location.

LocalLink — Two-Sided Micro-Services Marketplace

- Architected a full stack marketplace application connecting requesters with local service providers (tutors, caregivers, errand runners) through free text request posting, provider matching, in-app booking, and secure payment processing.
- Developed an AI powered matching engine using React.js, Node.js, Express, PostgreSQL, and NLP models that parses free text service requests to extract intent, skills needed, and urgency, then ranks and recommends providers instead of relying on rigid category filters.
- Implemented a real time booking and scheduling system with React, Tailwind CSS, Stripe payment integration, and Twilio notifications to handle appointment confirmations, cancellations, and reminders across multiple concurrent bookings.

Network Intrusion Detection Model

- Developed a machine learning intrusion detection model to classify malicious network traffic across 2M+ records, by building a Python based data preprocessing and training pipeline using Pandas and Scikit learn.
- Generated probabilistic threat predictions by implementing model evaluation using ROC-AUC, precision, and recall, simulating real world cybersecurity intrusion detection workflows.

Word on the Street

- Enhanced student financial management by developing cross platform mobile apps using React Native, AWS Lambda, and MongoDB. Optimized cloud backend performance, reducing download/upload times and achieving 99% up time, ensuring seamless and reliable access for users.

Skills

Frontend: React.js · React Native · Tailwind · Node.js · PyText · NLTK · TextBlob · Plotly · Matplotlib

Backend & Database: PostgreSQL · MongoDB · AWS DynamoDB · PrimeRx · AWS Lambda · AWS Cognito · AWS CodePipeline · AWS CloudWatch · AWS SNS · AWS QuickSight · Amazon ECR · Docker · RESTful APIs

Programming Languages: Python · C++ · Java · JavaScript · TypeScript · C · Swift · Kotlin · SQL · NoSQL · HTML/CSS

Testing & Tools: Jest, Mocha, Git, GitHub, REST APIs, JSON