Nitish Madabusi

https://www.nitishmadabusi.com

Toronto, ON, +1(647)891-7611

Email : nit.madabusi@gmail.com

GitHub: https://github.com/nitish06-c

Linkedin: https://www.linkedin.com/in/nitish-madabusi-447234105/

EXPERIENCE

Pockethealth   Toronto, ON
Software Engineer Intern   *May 2023 - August 2024*

- **Advanced ML-Driven Automated Appointment Follow-Ups**:
  - Designed and developed a resilient, event-driven system using microservices architecture with **Azure**, **C#**, **Go**, **MySQL**, and **Docker**, leveraging containerization for scalability and efficient data processing.
  - Developed clients to seamlessly integrate patient observations with our machine learning model and internal microservices.
  - Leveraged OpenAPI specification generation and Goose migrations to maintain up-to-date documentation and enforce consistency across development practices.
  - Designed and implemented comprehensive unit and integration tests to guarantee the seamless operation and reliability of the system with the machine learning model, ensuring thorough validation of all components.
- **External Logging and Alerting Infrastructure for Core Provider Services**:
  - Architected and implemented an efficient, compliance-friendly logging solution using **Azure** and **C#** to enhance observability of on-premise applications, significantly reducing investigation time for bugs and improving system monitoring.
  - Developed a real-time notification framework integrating Azure Container logs with **Prometheus** in the **Log Analytics Workspace**, improving communication, response times, patient care, and operational efficiency.
- **Secure Healthcare Data Integration**:
  - Contributed to the development of a secure HL7 interface engine over **TCP/IP**, implementing Health Level Seven (HL7) standards for confidential healthcare data exchange, impacting **1.7M+** patients across **150+** providers.
  - Refined the HL7 interface in **C#** by integrating new message classes, broadening support for additional healthcare providers, and optimizing data transmission. Developed sample resources to facilitate HL7 message ingestion testing for the engineering team.
- **Efficient Automated Appointment Communications**:
  - Implemented a reliable system to automate the opt-out process for appointment reminders, managing over **2,500** messages between patient and provider systems and **Customer.IO**.
  - Streamlined hospital staff operations by enhancing the appointment reminders dashboard with advanced filtering, sorting, and pagination in **Angular**, optimizing user management and visibility.

University of Toronto Learning Space Management   Toronto, ON
Tech2U Student Classroom Ambassador   *September 2022 - April 2023*

- **Technical Support and Team Collaboration**: Resolved projector and recording system issues, refined team coordination, and ensured seamless work shifts while enhancing faculty support.

PROJECTS

- **Healthy Mom and Child+ (React Native, Javascript, MongoDB, Expo)**:
  - **App**: Developed a health application with a team of 5 to educate, monitor, and detect health issues for women planning to conceive, those who are pregnant, perinatal women, and their children up to age 12.

EDUCATION

University of Toronto   Toronto, ON
Honors Bachelor of Science in Computer Science and Mathematics   *Sep. 2020 – June. 2025*

- **Relevant Coursework**: Software Tools & Systems Programming, Algorithm Design, Analysis & Complexity.

SKILLS

- **Languages**: C#, Go, Python, Angular, React, Node.js, HTML, CSS, C, Java, LaTeX, SQL
- **Technologies**: Git/Github/Gitlab, .NET, Numpy, Pandas, Matplotlib, MySQL, SQLite