

MOHAN MALLESHAPPA

Ph: +1 (201) 275-8449 | mohankgaraga@gmail.com | [linkedin.com/in/mohankgaraga](https://www.linkedin.com/in/mohankgaraga) | mohan1019.github.io

SKILLS

Programming Languages: Python, JavaScript, Java, C++, C, Go, .NET, Swift, Data Structures and Algorithms Optimization
Mobile & Web Technologies: React, Angular, Node.js, Django, Flask, REST, Kotlin, Apex, LWC, Fast API, NextJS
Database & Cloud: MySQL, MongoDB, Postgres, Pinecone, Google Cloud Platform, AWS, Azure
AI & ML Engineering: Machine Learning, Deep learning, GenAI, LLM, NLP, PyTorch, Keras, TensorFlow, Alteryx
Tools and DevOps: Docker, Kubernetes, Postman, Linux, Git, Redis, Kafka, Agile, BitBucket

EXPERIENCE

Sitracker

New Jersey, USA

Software Development Engineer Intern

May 2024 – May 2025

- Engineered a production tracking feature by integrating advanced **SQL** optimizations, backend workflow redesign, and dynamic UI components, improving data retrieval speed by **30%** and accelerating product lifecycle and design decision-making.
- Built a core feature for the **React** datatable, making it a scalable reusable framework adopted by **40%** of Sitracker's product.
- Triaged and resolved **35+** customer issues across **QA** orgs by performing **root cause analysis (RCA)** and delivering code fixes within **SLA** timeframes, reducing turnaround time by **25%** through adherence to **SDLC** processes.
- Developed a comprehensive **React Native** duty roster module, introducing a progressive calendar-based job to automate shift assignments, resource allocation, and troubleshooting workflows, projected to improve workforce productivity by **40%**.
- Refactored a project scheduling engine using **Apex batch processing**, improving execution performance by **20%**.

NeuroTechR3

New Jersey, USA

Research Assistant | NJIT

Aug 2024 – Jan 2025

- Crafted a scalable **Flask**-based Chatbot API, processing **10k+** daily document and user queries using **RAG** with **Pinecone** and **NoSQL** via **DynamoDB**, improving **80%** response accuracy while ensuring **HIPAA** compliance data privacy.
- Devised a **LangChain** powered input classification system that converts **natural language** into aggregation pipeline queries, reducing latency by **40%** through intelligent **RAG** and NoSQL routing of user requests.
- Collaborated with **cross-functional** teams to develop a real-time responsive **graph generation** system using **Matplotlib** for progress visualization, integrating **AWS S3** storage.

Cognitive Clouds

Bengaluru, India

Full-Stack Software Engineer

Aug 2022 – May 2023

- Designed a cross-platform mobile application using **React Native (TypeScript)**, **Node.js**, and **MongoDB**, featuring real-time appointment scheduling, push notifications (**FCM** for Android and **APNs** in IOS) and reducing service booking time by **60%**.
- Integrated **real-time** messaging functionality using **Quikblox API** and implemented secure payment processing via **Hyperpay Gateway**, ensuring seamless communication and consistent financial transactions while reducing transaction failures by **25%**.
- Sustained **90%+** test coverage with **Jest.js** via **CI/CD** pipelines, reducing production bugs and maintaining code quality.

Freight Deck Technologies

Bengaluru, India

Data Engineering Intern

Jan 2022 – Mar 2022

- Crafted **microservices** based data ingestion logic to capture and handle high-velocity delivery logs using Apache **Spark**, **Hadoop**.
- Restructured backend with **FastAPI** and **RabbitMQ**, boosting logistics visibility by **60%** through async workflow optimization.

EDUCATION

New Jersey Institute of Technology

New Jersey, USA

Master of Science in Computer Science

Sept 2023 – May 2025

Sir M Visvesvaraya Institute of Technology (VTU)

Bengaluru, India

Bachelor of Engineering in Computer Science

Aug 2018 – July 2022

PROJECTS

Healthy Eating Plate - [github](#)

Technologies: MongoDB, Express.js, React.js, Node.js

- Developed personalized **meal planning application** generating **500+** nutrition plans and released as an **open source** project.
- Used **React-Redux** for state management, enabling smooth interaction, commenting, and routine sharing across components.

Payroll Management System - [github](#)

Technologies: React, HTML, JavaScript, SQL Server, PHP

- Led the design and development of a comprehensive **payroll management system** serving **100+ administrators** with an algorithmic **calculation engine** and **intuitive interface** for real-time updates to bonuses, overtime, and deduction adjustments.

Bytematic Inventory Management System

Technologies: React, JavaScript, Spring Boot, Node.js

- Delivered a scalable **SaaS inventory management system** using **Spring Boot** with core modules for procurement tracking, purchase management, and real-time dashboards, improving business efficiency by **35%** and customer service delivery.

LEADERSHIP AND ACHIEVEMENTS

- Won tech quizzes and hackathons, including **Brainwave**, **TechKnow Quiz**, and **Smart India Hackathon** (Regional Round).
- Facilitated students in **Web Systems** coursework as a **Teaching Assistant at NJIT** for 18 months.