

# KARTHIK BODDU

New York, NY | krk02411@gmail.com | [Linkedin](#) | [Github](#)

## EDUCATION

### MONTCLAIR STATE UNIVERSITY

Masters in Computer Science

Relevant Coursework: Software Engineering; Operating Systems; Algorithms; Artificial Intelligence; Data Analysis

Montclair, NJ

Expected May 2024

### VELAGAPUDI RAMAKRISHNA SIDDHARTHA COLLEGE

Batchler of Technology

Vijayawada, INDIA

May 2018 – May 2022

## WORK EXPERIENCE

### MONCLAIR CESAC

Software Developer | Research Assistant

Montclair, NJ

May 2023 – Jan 2024

- Implemented **REST API** using **Spring Boot**, interaction with **Machine Learning** model.
- Developed **asynchronous processing** and **caching** to boost system throughput by **40%** and reduce latency by **30%** in Java.
- Tested by simulating over **10,000 concurrent users** and Protected API from **DDos** attacks and **pagination** attacks.

### INDIAN SERVERS

Software Developer Intern

Vij, IND

Jun 2021 – Aug 2021

- Integrated **Redux** into **ReactJS** application to manage states by **2x faster** to handle larger volumes of image data.
- Collaborated with clients, matched **100%** requirements, boosted user engagement by **25%**, and handled whole **CD/CI**.
- Fixed: Incorrect **Caching Headers**, Incorrect **Server Security**, Insecure **API Key Generation** and **Authorization**.

## PROJECTS

### AUTONOMUS GOLF-CART | [link](#)

Spring, Fall 2023

- Guided by **Prof.Wang**, I led a team of **10**, distributed **5** distinct weekly tasks, hosted regular meetings to enhance outcomes.
- Developed a compact server with **Spring Boot (Java)** and **C++** for sensor-actuator communication, Met **100% results** by learning diverse topics like circuit design and mechanics.
- Improved **60% accuracy** with replacement of cams with liber sensors and Developed **3x times** better Self Steering Control.

### LOW - RESOLUTION PEDESTRAIN DETECTION | [link](#)

Spring 2024

- Developed **REST API** and Trained **ML Model** for low resolution images Improved quality by **90%** for surveillance.
- Fixed: Data Quality Issues, Overfitting, Improper Model Selection and Tuning, Error Handling & Logging, Security Issues. achieved **10x** app speed.

### TWENTY | Open Source Project | [link](#)

Tech Stack: ReactJS, NextJS, PostgreSQL, Docker

- Resolved **issue#4502** in open-source **CRM repository** by debugging with **ReactJS**, enhanced user navigation.

### COLLABORATIVE NOTES TAKING APP | [link](#)

Tech Stack: Node.js, Express.js, Socket.io, MangoDB, React.js

- Developed both **Client** and **Server** side, Implemented Features like **Real-time Collaborative Editing**, Local Note Saving, Conflict Resolution, Easy-to-Use Interface.

## ADDITIONAL

**Technical Skills:** Advanced in JAVA and SQL; SpringBoot, SpringMVC, Hibernate/JPA, NodeJS, ReactJS, NextJS, PostgreSQL MangoDB, Maven, npm, git, Docker, AWS core.

**Awards:** 2022 National wide TCS HackQuest Finalist; 2022 (1/300) Coding Hackathon; 2021 (1/100) Engineering Technical Quiz Competition; 2019 (3/40) Technical Model Exhibition Competition; 2018 (1/300) CS DSA coding Competition; 2016 State wide Awarded with 100% Fee Reimbursement for 6 years.

**Publications :** K. Boddu, S. M, and S. N. "Tracking missing objects in a video using yolo3 in cloudlet network." | [link](#)  
Y. T. Karthik Boddu, L. B. "Classification of ImageNet retinal diseases using ResNet model" | [link](#)