

KARTHIK BODDU

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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 **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, and 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: Adv in **JAVA** and **SQL**; **SpringBoot**, **Hibernate/JPA**, **NodeJS**, **ReactJS**, **NextJS**, **MySQL**, **PostgreSQL**, **Cassandra**, **MangoDB**, **Docker**, **AWS**, **git**.

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](#)