HARISH REDDY THALLA

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EDUCATION:

National Institute of Technology Warangal

Warangal, India | 2017 - 2021

B. Tech in Mechanical Engineering - CS Courses CGPA: 8.48/10

Relevant Modules: PSCP(CS101, CS102), OOPS(CS390), M-1(MH101), M-2(MA151), TT(MA236), NSM(MA261), Robotics(ME461)

PROFESSIONAL EXPERIENCE:

Senior Software Developer - TLM Recon, Standard Chartered Bank

Nov 2023 - Present

- Fullstack development:
 - GET(GBS Engagement Tool): Spearheading a team in developing a consolidated application for tracking and managing GBS service requests, leveraging an internal framework(ServiceBench) using LitJs and Quarkus.
 - IAM & Rubikmas: Directed the migration of two Pega applications to the Servicebench framework.
- Python & Shellscript automations: Data extraction, transformation & cleansing scripts for unorganised xlsx, xml, pdf files
 - Email Integration: Engineered an extensive email integration framework using python to automate static creation in TLM.
 - ETL Logic Extractor(POC): Designed a script that extensively wrangle complex Informatica workflow XMLs to extract transformation logic and summarize them using LLMs for non-technical stakeholders

Software Developer - DFT Data Science Team, Standard Chartered Bank

Jul 2021 - Oct 2023

Tech Stack: Frontend - Javascript, Typescript, React | Backend - Java, Springboot, Flask | DB - Neo4j, Oracle SQL, Postgres SQL

- SCypher: Worked on a D3.js-powered knowledge graph visualization application, enabling real-time exploration of 40M+ banking entities and their relationships, enhancing data-driven decision making.
- SAGE: Built an application to track & quantify automation impact through cost reduction metrics and FTE savings analysis
- Admin Portal and Smartbot: Built a unified portal featuring 40+ self-service applications and conversational chatbots to explore and analyze data/insights for 50k+ FAQs and

Co-Founder, CTO - DineWave, PulsePalette Private Limited

Aug 2020 - May 2021

Tech Stack: Frontend - Javascript, React | Backend - Java, Springboot | DB - Postgres SQL | Cloud - AWS

- Ideated and developed a comprehensive suite of restaurant management software solutions, integrating customer interfaces, staff operations, and administrative controls, driving 30% operational efficiency and 26% revenue growth for clients
- Designed and implemented a vendor marketplace and direct-to-consumer delivery service, eliminating third-party fees and optimizing supply chain operations
- Successfully exited through product suite acquisition for \$25K USD, with prior recognition from Startup India and \$5K AWS startup grant

Robotics & AI Engineering Intern - Aufenbach

Sep 2018 - Aug 2020

- <u>Project Armatus</u>: Enhanced gaming experience by developing an ML powered VR setup & <u>omnidirectional treadmill</u> using Human Activity Recognition model built on CNN-GRU architectures to map IMU sensor activities to VR environment.
- <u>Self-charging peripherals</u>: Achieved self-powered computer peripherals by designing electromagnetic energy harvesting mechanisms

Machine Learning Summer Intern – <u>Balnc Care</u>

June - Sept 2019

- Built a 200k basketball activity image dataset by designing a Human Pose Estimation model using stacked conv-deconv framework.
- Developed a basketball activity classification model using KNNs, TPOT and CNN-LSTMs for intelligent scene analysis.

Research Intern | Machine Learning Applications on Image Processing | NIT Warangal

May - June 2019

(Advised by <u>Prof. J Ravi Kumar</u>)

- Provided Research Assistantship on multi-feature fusion architecture using HOG & VGG-Face for facial expression classification.
- Gave 3 seminars to 40 freshmen students on engineering applications of optimization techniques.

Machine Learning Research Internship | NIT Warangal

Jan - May 2019

(Advised by Prof. Hari Kumar Voruganti)

• Stress Analysis using CNNs: Reduced stress analysis computation time from 6 minutes to 1 second with 0.32% mean relative error using CNNs and squeeze-excitation architectures like SE-ResNet that produce approximated stress fields for cantilevered structures.

PROJECTS:

Robocon International Competition | Undergrad Robotics Research Association

July 2019- June 2020

- Designed and fabricated 2 autonomous robots that collaboratively perform complex tasks on Rugby balls.
- Executed Motion planning & path planning with grid & sampling-based algorithms. Implemented object tracking using R-CNNs and DeepSort Techniques to actuate Robot's pneumatic system.

PATENTS:

• System for Harvesting Electrical Energy Generated from Mechanical Energy | Application No : 202041057250 | Status : Published

PUBLICATIONS:

• Self-charging Peripherals with inbuilt Power Harvesting System

Conference: ICMSMT2020 | Published in : IOP Conference Series | DOI : 10.1088/1757-899X/872/1/012036

SKILLS:

Full Stack Development | DataStructures & Algorithms | Programming | C++ | Python | Java | Javascript | Computer Vision | RNNs | GANs | Project Management | LLMs | Gen-AI |

COURSES & CERTIFICATIONS:

- Robotics: Vision Intelligence and Machine Learning | University of Pennsylvania | EdX Audit
- Machine Learning A-Z: Hands-On Python In Data Science | Udemy
- CS231N- Convolutional Networks | Stanford University | Youtube | Audit
- Machine Learning | Coursera | Andrew Ng
- Neural Networks and Deep Learning | Coursera | Andrew Ng
- Data Structures and Algorithms | GeeksforGeeks

EXTRACURRICULAR ACTIVITIES:

- Co-Founder Phasors, startup aiming to provide free education to underprivileged students.
- Founder, Team Lead
 – Undergrad Robotics Research Association, NITW
- Joint Secretary- Mechanical Engineering Association, NITW
- Logistics Lead Associate E-Summit 2019 (Entrepreneurial Fest-NITW)
- Event Manager- IPL Auction, SpringSpree 2018 (Cultural fest NITW)
- Logistics & Publicity Subcore- Technozion 2019 (Technical fest NITW)
- Event Manager (IPL Auction) & Subcore Technozion 2018 & 2019 (South India's biggest technical fest)

ACHIEVEMENTS:

- GEM Individual Award- SC TTO Functions for building the interface for interacting with Fine-tuned LLM Models
- Exceptional Contribution Award Award for contributing to the ServiceBench community
- State 3rd Mark in Class XI Board examinations (Telangana | 2016)
- 1st in *Innovation Garage* Hackathon Ideathon (NIT Warangal | 2018)
- 2nd in *Innovation Garage* Hackthon Makeathon (NIT Warangayl | 2019)