Sriman Reddy Pingili

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Education

University at Buffalo, The State University of New York **August 2023 – December 2024**
Master of Science in Data Science. CGPA - 3.60/4 *Buffalo, NY*

International Institute of Information Technology, Bangalore **August 2018 – July 2023**
Integrated Master of Technology with a Minor in Computer Science. *Bangalore, India*
Specialization in Artificial Intelligence and Machine Learning

Teaching Assistant: *Led interactive sessions for 150+ graduate students on core Operating Systems topics.*
Courses: *Software Production Engineering, Data Structures & Algorithms, Programming Languages, Operating Systems, Database Systems, Computer Networks, Data Intensive Computing, Machine Learning, Visual Recognition, Image Processing.*

Technical Skills

Languages: C++, C, **Python**, **Golang**, Java, JavaScript, R, Bash
Web Technologies: HTML, CSS, RESTful API development, Node.js, React.js, Express.js, Redux, JSON, YAML
Databases: SQL, PostgreSQL, MySQL, MongoDB, Firebase
DevOps & CI/CD Tools: Jenkins, GitHub Actions, Docker, Ansible, Kubernetes, ELK Stack, Maven
Machine Learning & AI: Pandas, NumPy, Matplotlib, Scikit-learn, PyTorch, Keras, OpenCV, TensorFlow, Transformers
Other Skills: Object-Oriented Design, Git, AWS, Agile Methodologies, Microservices Architecture, SDLC, Multithreading, Linux, Unix, Matlab, LLMs, JUnit Testing, Jira, Postman, GitHub

Experience

Mathologic Technologies **September 2022 – December 2022**
Software Engineer *Bangalore, India*

- Revamped the **Shed Allocation** process by mapping locomotives to sheds, considering constraints like visiting stations, shed capabilities, and locomotive types, ensuring **100%** allocation and optimized resource utilization.
- Developed an efficient solution using a **min-heap and degree-based** approach, breaking down complex problems into smaller sub-problems, effectively managing shed candidates and clubbing scenarios.
- Implemented the algorithm in **Go**, transformed it into a RESTful API using **Gin**, and deployed it on the Mathologic server ensuring efficient handling of requests.

Indian Institute of Science **December 2022 – June 2023**
Software Engineer Intern *Bangalore, India*

- Engineered an **Argo server** using Go, creating RESTful APIs for workflow submissions, log streaming, and management, handling up to **90+** workflow requests daily.
- Created a **Flink job** submission API with cron scheduling, automating the execution of multiple data processing jobs daily, improving pipeline reliability and consistency across scheduled runs.

International Institute of Information Technology, Bangalore **January 2022 – May 2022**
Research Assistant *Bangalore, India*

- Improved a multimodal transformer for **Visual Question Answering** for the visually impaired, achieving a **25%** increase in answer accuracy by integrating text, visual, and OCR features.
- Developed dynamic pointer networks for iterative answer generation, boosting model performance on TextVQA benchmarks by **32%** while reducing prediction errors.

Projects

DevOps-Enabled Problem-Solving Tracker App | *React.js, Node.js, GitHub Actions, Docker, Ansible, AWS EC2*

- Developed a React-based web app with LocalBase (Firebase-style DB) for offline storage, enabling users to track their progress on interview problems and manage question sets.
- Built a CI/CD pipeline with GitHub Actions for automated testing and deployment, Docker for containerization, Ansible for deployment on AWS EC2, and integrated ELK Stack for monitoring.

BookBar Web Application | *React.js, Redux, Node.js, Express.js, MongoDB*

- Built a full-stack website from scratch which acts as an online marketplace for buying and selling books. Added session handling capabilities to maintain user state after login, logout, refresh, and browser shutdown.

Mercari Price Suggestion Challenge | *Python, Flask, HTML, CSS*

- Spearheaded Mercari product price prediction using data preprocessing, feature engineering, and algorithm optimization. Built an interactive UI for real-time price predictions.