SPOORTHY KUMBASHI RAGHAVENDRA

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EDUCATION

Texas A&M University, College Station, Texas **Aug 2025 - May 2027**
Master of Computer Science

PES University, Bangalore, India **Aug 2019 - May 2023**
B.Tech in Electronics and Communication Engineering – **Gold Medalist** CGPA: **9.68/10**

WORK EXPERIENCE

Software Engineer I, JP Morgan Chase & Co., Bengaluru **Jun 2023 – Jul 2025**

- Designed and deployed scalable **Spring Boot** microservices for processing 250–300k daily volumes of Foreign Exchange trades worth $10–15B, reducing operational risk and maintenance costs while improving system resilience
- Built reusable **Java libraries** to support multi-**MQ** consumers and **Kafka** Ack/Nack handling between services, enhancing observability across platform and reducing message debugging time by 4–5 hours per service
- Migrated and optimized on-premise **Oracle databases** to cloud-based infrastructure with minimal downtime and optimized storage and query performance through **defragmentation** tasks
- Developed **Python automation tools** to simulate high-volume trades for performance testing and handling bulk data CR operations, saving the QA team 7–8 hours weekly
- Resolved vulnerabilities and code smells identified by **SonarQube** and **Fortify** across services, increasing security score from 65% to 80+% and included it as a necessary step in the CI/CD pipeline
- Converted the **REST APIs** between the UI and backend to **GraphQL** reducing frontend data processing complexity and improving load time by ~100ms

Software Engineering Intern, JP Morgan Chase & Co., Bengaluru **Feb 2023 – May 2023**

- Led end-to-end development of a real-time monitoring platform for analyzing trade flow across microservices, combining a scalable Spring Boot backend with a responsive React frontend
- Implemented dynamic pod scaling, live log streaming and service health monitoring to enable granular tracking of trades and real-time failure alerts, cutting resolution time by 40% and enhancing support team efficiency

Machine Learning Project Trainee, BGSW, Bengaluru **Jun 2022 – Jul 2022**

- Engineered an **NLP**-driven preprocessing pipeline using spaCy, NLTK and regex to transform symbolic logs and reports into structured data by extracting key test parameters, enabling downstream ML model training
- Trained supervised **ML models** on structured data to auto-generate standardized testing instructions for electric vehicles components, decreasing manual testing effort by 60% per cycle

PROJECTS

Deep Learning for Signal Detection in RSMA Receiver ***Lead Author*** *@ IEEE NCC 2023;* **DOI** ***10068068***

- Developed an **LSTM**-based deep learning model for wireless signal detection that outperformed baseline algorithms by lowering error rates in noisy, multi-user 5G network settings

Deep Learning for Radiogenomic classification of Brain Tumor ***Lead Author*** *@ IEEE INDICON;* **DOI** ***10039760***

- Led end-to-end research on a **ResNet** based **CNN** model to predict status of genetic biomarker from MRI scans for early prediction of chemotherapy response in brain tumor patients

Financial Data Extraction and Analysis

- Built an end-to-end LLM-based pipeline to extract and consolidate 10-K filings of publicly traded companies and apply prompt-engineered analysis to deliver multi-year trend insights and qualitative valuation for investors

TECHNICAL SKILLS

Languages, Tools & Frameworks: Python, Java, C, SQL, React, HTML, CSS, MATLAB, TensorFlow, Keras, Flask, Django, Spring Boot, Cucumber, JUnit, Maven, IntelliJ, Jenkins, Git, Docker, Kubernetes

CO-CURRICULARS

- **Class Representative -** Facilitated communication between students and faculty **Aug 2020 – May 2023**
- **Teaching Assistant -** Mentored 40+ students for Digital Image Processing course **Aug 2022 – Dec 2022**