MANOJ HANUMANTHU

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ABOUT ME

I am a highly motivated and results-oriented software engineer with over two years of experience in Java full-stack development, ETL testing, and cloud-based solutions. Currently working at 360T Deutsche Börse Group, I am skilled in developing and optimizing APIs, automating workflows, and leveraging AWS cloud services to drive operational efficiency. My expertise spans Java, Python, C, and modern web technologies, along with strong experience in automation and testing. Passionate about solving complex challenges, I excel in dynamic environments and am committed to continuous learning and professional growth. My goal is to contribute to innovative projects in Test Automation or DevOps Engineering.

EDUCATION

- **Master's in Information Technology**, Frankfurt University of Applied Sciences, Germany (Oct 2024 – Present)
- **Bachelor's in Electronics and Communication Engineering**, R.M.K Engineering College, Chennai, India (June 2019 – May 2022)   CGPA: 8.82/10.0

EXPERIENCE

360T Deutsche Börse Group, Frankfurt   *Dec 2024 – Present*
Working Student - Orchestration and Stability

- Developed and maintained the **CatchItMain database** using Python, ensuring efficient data handling.
- Migrated **log processing workflows** from Sentry to PUI, designing and implementing the solution from scratch.
- Fetched logs from **Elasticsearch**, cleaned stack traces, and generated unique HashIDs for grouping logs.
- Automated periodic log processing using timestamps and integrated with the PUI system.
- Built scalable **APIs with FastAPI** and streamlined real-time data analysis with **Elasticsearch**.

Mphasis, Bengaluru, India   *June 2023 – October 2024*
Software Engineer - FSC Chassis (FedEx)

- Developed an **Operational Data Store (IDS)** for FedEx Supply Chain, integrating data from multiple sources.
- Executed test cases using **SQL queries for Data Validation and Transformations**.
- Conducted detailed **report analysis and testing procedures** to ensure data accuracy and integrity.
- **Mentored team members** and provided knowledge transfer on project-specific processes.
- Validated data between source and target tables, ensuring proper transformations and reporting.
- Applied root cause analysis to identify and address result mismatches, improving data reliability.

Mphasis, Pune, India   *June 2022 – May 2023*
Associate Software Engineer

- Assisted in managing **AWS cloud resources**, with hands-on experience in provisioning, monitoring, and optimizing cloud services.
- Provisioned **EC2 Instances**, ensuring proper configurations and security.
- Managed **S3 Buckets** for secure file storage, implementing data encryption and access control.
- Assisted in managing **IAM roles and policies**, ensuring appropriate access permissions.
- Monitored resources using **CloudWatch**, identifying and resolving performance issues.
- Contributed to **cost optimization** efforts by reviewing AWS usage and recommending improvements.
- Applied AWS security best practices, including VPC configurations, security groups, and MFA.

Francium Tech, Chennai, India   *March 2022 – May 2022*
Intern - Solution Consultant

- Created and executed **manual test cases** for functional and regression testing, ensuring software met business requirements.
- **Identified and documented bugs** using **Jira**, providing clear reproduction steps.

- Conducted **cross-browser and cross-device testing**, ensuring consistent functionality across platforms.
- Assisted in automating **regression tests using Selenium**, improving testing efficiency.
- Collaborated with **developers and QA teams** on bug resolution and feature development.
- Contributed to an **automated test suite**, maintaining and updating scripts for critical functionality coverage.
- Created detailed **test reports**, documenting test results and defect status.
- Gained hands-on experience in **automation tools and techniques** to enhance testing effectiveness.

ACADEMIC PROJECTS

Input Reconstruction Using Hierarchical Temporal Memory and K-Nearest Neighbors Classifiers
- Designed and implemented an experiment to reconstruct scalar inputs using **HTMClassifier** and **KNNClassifier**.
- Developed a machine learning pipeline integrating **HTM encoding, SDR generation, and classification-based reconstruction**.
- Conducted a **comparative analysis** of HTM and KNN classifiers using similarity metrics such as **cosine similarity** to evaluate accuracy and efficiency.
- Utilized **.NET Core, NeoCortexAPI, and OxyPlot** for implementation and visualization.
- Presented results with **similarity graphs comparing original and reconstructed inputs**, highlighting classifier performance differences.

Bachelor's Thesis: Vehicle Accident Detection and Monitoring System using IoT
- Led the development of an **emergency protocol** using **Zigbee devices** for real-time vehicle accident monitoring.
- Integrated **IoT** for real-time tracking of **vehicle conditions** and **accident responses**.

SKILLS

- **Programming:** Java, Python, C#
- **Testing & Automation:** Selenium, TestNG, Postman, Java Automation, ETL QA Testing, ETL Report Testing
- **Databases:** SQL, MySQL, Elasticsearch
- **Web Development:** HTML, CSS, Angular, FastAPI
- **Cloud & DevOps:** AWS (Certified Developer Associate - DVA-C02), IAM, EC2, S3, CloudWatch, VPC, Docker, CI/CD
- **Development Methodologies:** Agile, Scrum
- **Version Control:** Git, GitHub
- **Soft Skills:** Strong problem-solving, debugging, mentoring, and cross-functional collaboration

CERTIFICATIONS

- AWS Certified Developer – Associate (DVA-C02) (Apr 2023 – Apr 2026)
- Python Full-Stack Internship at Brain O Vision Solutions Pvt. Ltd. (Sep 2021)
- Web Development Internship at Brain O Vision Solutions Pvt. Ltd. (Aug 2021 – Sep 2021)
- Technical Training - Sri Venkateswara Bhakti TV Channel (May 2018 – Nov 2018)