

Adithya Harish

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Experience

Marriott International

Jun. 2025 - Present

Software Engineer Intern

Bethesda, MD, USA

- Architected, developed, and deployed an enterprise-wide **Business Decision Tool** using Java Spring Boot, PostgreSQL, and Docker, enabling 10+ Internal Marriott systems to dynamically evaluate business logic— fully decoupling business rule management from application code.
- Built a rule configurator and simulation dashboard using **React**, empowering business users to define, test, and validate rules in real-time, streamlining collaboration across multiple departments and improving workflow efficiency.

Fidelity Investments

Jan. 2022 - Jun. 2023

Software Engineer

Bangalore, India

- Developed a centralized Flask-based application, integrating data from ALM tools (**Sonar, Bitbucket, Snow, Cloud-Bees**) into a unified platform, reducing manual filtering time by 80%.
- Enhanced UI functionalities for the Investment Ops Portal using Angular, resulting in a increase in user engagement. Developed a Python-based dashboard to streamline **non-functional testing**, reducing developer workload by 10x.
- Implemented a cloud resiliency dashboard for **AWS EC2, Snow, and Cloudability**, automating compliance checks to enhance system reliability by 30% and enable proactive issue resolution.
- Delivered cost-saving recommendations via actionable insights into instance sizing and CPU utilization, reducing operational costs by 15%.
- Developed automated Java tests using the **Karate** Framework and implemented **CI/CD** pipelines with **Jenkins** and **Kubernetes**, reducing manual testing efforts by 50%
- Designed and implemented RESTful APIs, optimizing data flow and streamlining server-client interactions, resulting in a 50% improvement in data retrieval efficiency and significantly reduced response times.

Deakin University

Feb. 2022 - Apr. 2022

Research Intern

Melbourne, Australia

- **Explainable AI:** Worked on enhancing the transparency of machine learning models using SHAP and LIME frameworks, achieving a 92% model accuracy for RandomForestClassifier while focusing on straightforward emerging technologies.

Education

Virginia Tech

Aug. 2023 – Dec 2025

Master of Science, Computer Science (Thesis); GPA: 3.90/4.0

Blacksburg, VA, USA

PSG College of Technology

Aug. 2018 - May. 2022

Bachelor of Technology, Information Technology; GPA: 9.53/10.0

Coimbatore, India

Projects

Networking App for Marriott International (Hackathon) | [GitHub](#)

- Led a 36-hour app development project aimed at connecting Marriott guests with similar interests to foster a more social hotel experience. Utilized Firebase, Python Flask and Flutter and Integrated machine learning models to match user preferences. Awarded Honorable Mention for innovative design and execution among 100+ teams.

Comparative Security Analysis of ChatGPT and Stack Overflow | [GitHub](#)

- Conducted a focused study comparing security-related programming queries using PMD tools, identifying a 70% security violation rate in ChatGPT vs. 18% in Stack Overflow, highlighting AI's limitations in secure coding.

DocuGen: AI-Powered GitHub Documentation Generator | [GitHub](#)

- A tool that generates adaptive documentation for GitHub repos, with setup guides and branch comparisons across multi-language codebases. Improves code comprehension and reduces manual effort using Python, Tree-sitter, and LLMs.

Technical Skills

Languages : Python, Java, C++, SQL, Typescript, Javascript, C#, HTML/CSS

Frameworks/Technologies : Django, Flask, Spring Boot, React, Angular, Node.js, Karate, AWS(EC2,S3)

Databases : MySQL, SQLite, MongoDB, Tableau, NoSQL, PostgreSQL

DevOps : Git, CI/CD, Jenkins, GitHub, Jira, Kubernetes, Docker, Visual Studio, Windows, Linux

Software Development : Agile, Scrum, API Design, Test Automation, System Design, Problem-Solving

Publications

Covid-19: Comparison of Time series forecasting models and Hybrid ARIMA-ANN | [Link](#)

Improving Security with Federated Learning | [Link](#)

Summarization of Customer Reviews in Web Services using Natural Language Processing | [Link](#)