BALAVIGNESH A U

AI Agent Developer | Python · LLM · RAG · AI Agents · FastAPI · React
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SUMMARY

Early-career AI agent developer (B.Tech, AI & Data Science, CGPA 7.54/10) who builds in Python and ships full-stack: agentic LLM workflows with browser automation, RAG components, prompts, document-processing pipelines and REST APIs, with React and Angular front-ends. Built LLM and NLP projects with LangChain, Hugging Face and FAISS, and shipped Python backends across three internships. Uses AI coding tools (Claude, Claude Code, Codex, GitHub Copilot, Google Antigravity) with review before merge. Comfortable with Git and pull-request reviews, documents results and setup clearly, and handles data responsibly. Quick learner who acts on feedback and raises blockers early. AWS Cloud Practitioner (GenAI) certified.

TECHNICAL SKILLS

AI Agents & LLM: Agentic workflows, LLM-based agents, browser automation, tool / function calling, multi-step planning and reasoning, memory and state handling, human-in-the-loop approval controls, prompt design and engineering, structured (JSON) outputs, LLM response evaluation, guardrails and responsible use of data
RAG & GenAI Frameworks: Retrieval-augmented generation (RAG), embeddings, FAISS (vector search), semantic retrieval, LangChain, Hugging Face Transformers, document-processing pipelines, structured data extraction
AI-Assisted Development Tools: Claude, Claude Code, OpenAI Codex, GitHub Copilot, Google Antigravity — prompt-driven implementation, test generation, refactoring and code review
Exploring: LangGraph, MCP (Model Context Protocol), multi-agent orchestration
Python & Data Handling: Python, data preparation and cleaning, SQL, scripting, OOP
Frontend & Mobile: React.js, Angular, React Native, Flutter, TypeScript, JavaScript, HTML5, CSS3, Tailwind CSS, Bootstrap, PWA
APIs & Backend: REST API design, FastAPI, Flask, JWT authentication, Node.js, Firebase, API testing (Postman)
Databases: PostgreSQL, MySQL, MongoDB, Firebase
ML & NLP Fundamentals: Machine learning basics, model training and evaluation, NLP, sentiment analysis, text classification, TensorFlow, CV
Delivery & Cloud: Git, GitHub, pull-request workflow and code reviews, GitHub Actions (CI/CD), Docker, pytest, Jest, Jira, Google Cloud Platform (deployment), AWS (Cloud Practitioner certified)
Other: Java; Data Structures & Algorithms, DBMS, Operating Systems, Computer Networks, System Design Basics; English, Tamil

EXPERIENCE

Zuntra Digital — AI Agent Intern | *Python, FastAPI, LLM Agents, Browser Automation* *Jun 2026 – Jul 2026*
- Developed an AI-powered browser extension that automates enterprise workflows, integrating LLM-based agents with browser automation for intelligent task execution.
- Designed and implemented backend APIs in Python and FastAPI for secure communication between the browser extension, backend services and enterprise platforms.
- Collaborated with the engineering team to build scalable, production-ready AI features focused on performance, reliability and a seamless user experience.

DOORBOX.AI — SDE Intern (Android App Development) | *Python, Flask, FastAPI* *Feb 2026 – Apr 2026*
- Designed and implemented backend APIs using Flask and FastAPI for industrial inspection workflows, enabling real-time report generation and seamless frontend integration.
- Integrated front-end components with Flask-based FastAPI services, enabling real-time inspection reporting and document workflows.

Infosys Springboard — AI Engineer Intern (Remote) | *Python, Machine Learning* *Nov 2024 – Jan 2025*
- Gained hands-on experience in end-to-end ML workflows, including data preprocessing, model training and evaluation.
- Applied Python and applied AI concepts to real-world case studies and problem statements.

PROJECTS

SiteSense — Intelligent Web Navigation | *RAG, LLM, Vector Search* *Jan 2026*
- Developed a RAG-based AI chatbot using LLMs and vector search for accurate handling of website queries.
- Enabled semantic retrieval and smart page redirection to improve user navigation.

Altuno — AI Finance Management App | *React Native, Firebase* *Nov 2025*
- Built a cross-platform mobile application using React Native and Firebase for real-time data synchronization.
- Implemented expense categorization, income tracking and monthly analytics tailored for student users.

EDUCATION

SRM Valliammai Engineering College, Chennai — B.Tech, AI and Data Science | **CGPA: 7.54 / 10** *Expected March 2027*
Class XII (HSC): 76%, Sivananda Rajaram Senior Secondary School, Chengalpattu (April 2023)

CERTIFICATIONS, HACKATHONS & ACHIEVEMENTS

- **Certifications:** AWS Cloud Practitioner (GenAI); NPTEL — Programming in Java; NPTEL — Python for Data Science; Microsoft Learn — AI, Data Analysis, Cloud Systems.
- **Hackathons:** 5+ national-level hackathons — LLM Healthcare (SRM University); Hack The Horizon (Coimbatore); Hackgenix (Sathyabama University); Tiforage'26 (Rajalakshmi Institute of Technology); Cliqtrix'26 (Zoho).
- **Achievements:** Completed three industry internships in AI engineering, AI agent development and Android application development; built AI-powered and full-stack applications with Python, React, FastAPI, Flask and Firebase.