Dhruv Puri

AI/ML Engineer | Founding Full Stack Engineer | SDE

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SUMMARY

Software Engineer with 3 years of experience developing a diverse range of scalable applications, from 3D printer HMIs to AI agents using **Generative AI** and **RAG pipelines**. Combines expertise in **Python**, **React**, **LangGraph, and CI/CD Pipelines** to build impactful solutions that slash post-release bugs by 20% and reduce user setup time by 30%.

PROFESSIONAL EXPERIENCE

JUICELABS.AI   BENGALURU, INDIA.
AI/ML Engineer   **OCT 2025 - Present**

- Built research pipelines for ad-creative generation, including data collection, advanced prompting, model evaluation and multimodal asset synthesis.
- Designed multi-agent orchestration workflows to generate and iterate scripts, images and videos using **Sonnet 4.5, Gemini 2.5 Flash and VEO 3.1**, enabling faster creative experimentation.

SYTOLAB / KREATOR3D   BENGALURU, INDIA.
Founding Software Engineer   **JAN 2024 - OCT 2025**

- As the sole developer, led the end-to-end creation of a 3D printer HMI (**React, Flask**) with a Computer Vision (**OpenCV**) module, improving print accuracy by 50% and reducing user setup time by 40%.
- Engineered the hardware integration layer for the HMI on embedded Linux (Raspberry Pi), establishing robust firmware communication increasing print accuracy by 30%.

PAYTM   DELHI, INDIA.
Software Development Engineer in Test   **JAN 2023 - JAN 2024**

- Python automation framework for device and high-volume **REST API** testing, and integrated it into a **Jenkins CI/CD** pipeline, resulting in a 50% reduction in testing cycles, 25 hours of manual effort saved weekly, and a 15% decrease in deployment delays. Generated test reports (**Matplotlib**) that identified 50+ critical pre-release bugs, tracking them in **JIRA** and cutting post-release issues by 20%.
- Leveraged **AWS (S3, DynamoDB)**, **Boto3 SDK, SQL, and Kafka** streams to manage and validate test data across 10M+ transactions; generated **Matplotlib** reports from this data to identify 50+ critical bugs in **JIRA**, slashing post-release issues by 20%.

PROJECTS

AGENTIC RAG SYSTEM WITH LANGGRAPH
An intelligent conversational AI system with chat context that converts natural language queries into SQL operations and generates multi-format outputs (text summaries, data tables, and visualizations) using advanced workflow orchestration. Built using **Python, LangGraph, Azure OpenAI API, SQLite, Pandas, Matplotlib/Seaborn**, with production-ready features including conversational memory, error handling, rate limiting, and SQL injection protection.

AGENTVC
Architected a conversational AI platform for founders to practice investor pitches, featuring a document processing pipeline that analyzes pitch decks to generate feedback. The full-stack application was built with **Python (Flask/FastAPI)**, **React, PostgreSQL, real-time transcription APIs, and Docker**.

SKILLS

PROGRAMMING LANGUAGES: PYTHON, JAVA, SQL, C/C++, HTML/CSS, JAVASCRIPT	**FRAMEWORKS/LIBRARIES:** REACTJS, NEXTJS, FLASK, NODE.JS	**LLM/RAG:** LANGGRAPH, RAG PIPELINES, VECTOR DATABASES (CHROMADB, QDRANT)
PROMPT ENGINEERING: JSON, XML, YAML PROMPTING	**GENERATIVE AI:** IMAGE GENERATION (NANO BANANA, SEEDDREAM 4.0)	**WORKFLOW AUTOMATION:** N8N, MAKE.COM
TESTING TOOLS: CYPRESS, SELENIUM, POSTMAN, JIRA	**CLOUD & DEVOPS:** AWS (S3, DYNAMODB), DOCKER, JENKINS, GIT	**DATABASES:** MONGODB, DYNAMODB

EDUCATION

DR APJ ABDUL KALAM TECHNICAL UNIVERSITY | B.TECH HONORS, ELECTRONICS & COMMUNICATIONS ENG.