Rohit Swami

rohitswami.com

Email: rohitswamicode@gmail.com | **Mobile**: +91-8059459498
LinkedIn: linkedin.com/in/rowhitswami | **GitHub**: github.com/rowhitswami

Summary

Senior Software Engineer with **5 years** of experience delivering **scalable, secure, and cost-efficient cloud architectures**. Skilled in data pipelines, back-end services, interactive dashboards, and client-facing applications with strengths in performance optimization, infrastructure automation, and mentoring teams. Adaptable and business-driven, well-versed in collaborating with clients to translate needs into software that improves reliability and scale, while also **driving revenue growth and securing contracts**.

Technical Skills

Languages & Scripting:	Python, TypeScript/JavaScript (ES6+), SQL, R, Bash, Go, HTML/CSS
Frameworks & Tools:	FastAPI, Flask, Django, React, Node.js, Next.js, Express.js, Shiny, Redux, PyTest, Jest, Cypress
Cloud (AWS):	EC2, Batch, Lambda, EKS, S3, RDS/Aurora, DynamoDB, API Gateway, CloudWatch, VPC, Step Functions, SQS/SNS
DevOps & Infra:	Docker, GitHub Actions, CI/CD, Terraform, AWS CDK
Data Engineering:	Polars, Pandas, Parquet, dbt, SQLAlchemy, PostgreSQL, MongoDB
Soft Skills:	Team Leadership, Architecture Design, Mentoring, Agile, Cross-functional Communication

Experience

Elucidata — New Delhi (Remote)

Senior Software Engineer — *Aug 2024 – Present*
Software Engineer II — *Jan 2023 – Aug 2024*
Software Engineer I — *Feb 2022 – Jan 2023*

- Rebuilt graph engine (**R to Python/Polars**); achieved **10x faster runtime** and **80% less memory**, scaled to **100K+ entities**.
- Optimised KEGG pathway rendering; reduced runtime from **22 minutes** to **under 1 minute** and UI latency from **15 minutes** to **under 1 second**.
- Built a production-grade **Streamlit + Python** app with **bi-directional S3-EC2 sync**, and Elastic IP deployment - enabled **instant h5ad visualization** and cut runtime from **hours to seconds**.
- Developed a **React + Next.js + FastAPI** platform for **OMOP table mapping**, integrating PostgreSQL validation - **reduced manual mapping effort by 70%**.
- Designed **AWS Batch** pipelines (10,000+ jobs/month), implemented spot/on-demand mix, and cut infra costs by **28%**.
- Architected **Redis + WebSocket** microservice; delivered **sub-100 ms** notifications at scale.
- Built production-ready **Shiny apps** and **POCs in React/Node.js/Python** that supported client demos and secured new contracts.
- Mentored **three** engineers, introduced **CI/CD automation (85% test coverage)**, and cut production issues by **40%**.

Ignite Solutions — Pune (Remote)

Software Engineer — *Jan 2021 – Feb 2022*

- Built demand-forecasting pipelines in **Python**; improved accuracy by **15% MAPE** across **500K energy meters**.
- Modelled **100M+ credit card transactions**; boosted upsell precision to **90% in pilot region**.
- Developed recruitment portal using **Flask + Google Workspace APIs**; reduced hiring cycle time by **30%**.

Education

Lovely Professional University — Aug 2016 – Aug 2020

B.Tech, Computer Science & Engineering — *Punjab, India*

Awards & Achievements

- Achieved **Expert Tier** in Dataset (Top 0.05%) & Notebook (Top 0.07%) on Kaggle.
- Co-authored Poster TP 476 at **ASMS 2025** with Yale University — “MAD-Lib: Library Optimisation for Enhanced Metabolite Annotation”; workflow cut manual LC-MS annotation from weeks to days.
- Solved **250+ DSA** questions on LeetCode, Codeforces, and CodeChef.
- Ranked **Top 10** out of 45+ teams in HaXplore Hackathon at **IIT-BHU**.