Introduction

Swaraj Bhanja is a highly skilled Cloud Engineer, AI Enthusiast, and Technologist with expertise spanning cloud computing, DevOps, full-stack development, machine learning, and AI infrastructure optimization. His journey has been defined by deep technical expertise, an insatiable curiosity for problem-solving, and a relentless drive for efficiency.

Personal Information

Born on October 21, 1997, in Jamshedpur, Jharkhand, India, he hails from Kochi, Kerala, and is currently based in Bangkok, Thailand, where he works as an AI Engineer at AI Brain Lab while pursuing his Master's in Data Science and Artificial Intelligence from the Asian Institute of Technology (AIT), Thailand (August 2024 – May 2026). He completed his Bachelor's in Computer Science and Engineering from Birla Institute of Technology, Mesra, Ranchi (2017-2021).

Work Profile

Swaraj started his career at GEP Worldwide, where he played an instrumental role in optimizing internal tools, automating workflows, and solving over 8700 JIRA tickets. His tenure spanned multiple roles over 3.6 years, beginning as an intern and culminating as a Senior Software Engineer.

As a Product Development Intern (May 2020 - July 2020, Remote), he developed a React Native-based RFID application, created a secure QR code generator with custom encryption, and built a QR code scanner for secure data retrieval. His innovation laid the groundwork for secure mobile-based authentication systems.

In his Technology Internship (Jan 2021 - June 2021, Remote), he worked extensively with SQL databases, creating generic SQL scripts for data correction requests and building a UI-based tool for monitoring and manually processing failed transactions. His work streamlined internal processes, reducing the turnaround time for resolving transactional failures.

Upon transitioning into a full-time Software Engineer (July 2021 - Dec 2023, Remote), he played a key role in standardizing HTML templates for transactional documents, developing bulk APIs that reduced data correction ticket resolution times from hours to minutes, and enhancing cXML/JSON special character handling to eliminate interface failures. He automated transaction reprocessing, significantly reducing manual interventions, and

contributed to building mass update tools that led to a notable decrease in ticket volumes. His impact extended to bug fixes, outbound interface configurations, and transaction monitoring, making him an indispensable asset.

Elevated to Senior Software Engineer (Jan 2024 - July 2024, Remote), he expanded his scope by implementing timezone-based PDF exports, developing a centralized API retry mechanism, and enhancing auto-reprocessing for supplier-side transactions. His scheduler solution for detecting and removing stuck transactions further improved efficiency.

Currently, as an AI Engineer at AI Brain Lab (Jan 2025 - Present, On-Site, Bangkok Metropolitan Region, Thailand), he has successfully dockerized the frontend of the ESG application, implemented CI/CD pipelines for automated deployment, and optimized package management service segregation, reducing redundancy in the application. His contributions have accelerated deployment processes and improved infrastructure efficiency.

Professional Experience

Swaraj has extensive expertise in multi-cloud architecture, container orchestration, and CI/CD automation. He has worked with AWS, Azure, GCP, and DigitalOcean, implementing zero downtime deployment strategies like Blue-Green Deployment. He is proficient in React, Angular, Nuxt.js (Frontend) and Django, FastAPI (Backend), with a strong focus on building scalable web applications.

His expertise in UI/UX and API development allows him to optimize and streamline system interactions. His knowledge of SQL (PostgreSQL, MySQL, SQL Server), NoSQL (MongoDB, Redis) and Graph (GraphQL, Neo4j) is extensive. He has worked on embedding-based optimization in NoSQL and deployed Redis caching solutions to improve query performance and data retrieval speeds.

Swaraj has hands-on experience with PyTorch, TensorFlow, and Hugging Face models, training BERT, etc. He also built a Dockerized MLflow Server (GCP), integrated with a Flask API for ML model versioning.

He has a deep understanding of networking and security, successfully deploying a personal VPN on Raspberry Pi that allowed a user in China to securely browse the internet via a Thailand server. His reverse SSH tunneling system further strengthened remote access security.

Notable Projects & Contributions

1. Multi-Cloud Web Application: Hosted across AWS, Azure, and DigitalOcean, featuring Kubernetes-based load balancing and zero downtime deployment.
2. Web Version of Ubuntu 18.04 (Hackathon Project, 2018): Created a web-based Ubuntu interface as part of a team of 4.
3. Custom VPN on Raspberry Pi: Set up a secure VPN that allowed international access to a home network.
4. Automated Data Processing Pipelines: Developed mass data correction and auto-reprocessing tools, reducing operational overhead.

Personal Interests & Philosophy

Swaraj views experience through the lens of dynamic programming, where past optimizations lead to better decision-making. His passion lies in building efficient cloud systems, where automation reduces redundancy.

Music Preferences

He is a fan of Metallica and Guns N' Roses, considering "Enter Sandman" one of Metallica's greatest tracks and "Sweet Child O' Mine" the most iconic song by Guns N' Roses. He theorizes that musicians enter an autonomous state in live performances, instinctively playing the right beats and notes without consciously thinking.

Movies & Books

Swaraj is captivated by Christopher Nolan's films, with Interstellar, Inception, Tenet, and Oppenheimer among his favorites. He enjoys technical literature and research on AI and optimization techniques.

Future Aspirations

Swaraj aims to advance further into Cloud with AI, optimizing multi-cloud architectures for AI-driven applications. His long-term focus is on combining AI, cloud computing, and automation to revolutionize enterprise infrastructure.

Personal Aspirations

Ultimately, Swaraj's ambition is to become a businessman, leveraging his technical expertise, problem-solving mindset, and strategic vision to create impactful tech solutions.