SWARAJSING PATIL

swarajsingpatil@gmail.com | +1 5513437450 | Portfolio | LinkedIn | United States

EDUCATION

Master of Science in Computer Science, Stevens Institute of Technology *May 2024 | Hoboken, USA*
 Coursework: Web Programming, Agile Software Development, Data Structures, Design Patterns **GPA: 3.7**
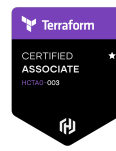
SKILLS & CERTIFICATIONS

Languages: JavaScript, Python, TypeScript, Java

Frameworks: React, Node.js, Django, Next.js, Express, GraphQL, FastAPI, API Development, REST, Microservices

Cloud & DevOps: AWS, Docker, Kubernetes, Git, Terraform, Jenkins, GitLab CI/CD, Microsoft Azure

Databases: MySQL, DynamoDB, PostgreSQL, MongoDB, Redis

Certifications:
- AWS Certified **Solutions Architect** – Associate (SAA-C03)
- HashiCorp Certified: **Terraform Associate** (003)
- Certified Kubernetes Administrator (CKA)

WORK EXPERIENCE

Software Engineer *July 2024 – Present*
Changing the Present | **Node.js, JavaScript, React, Redux, Express, PostgreSQL, AWS, Terraform** *New York, United States*
- Led the development and optimization of RESTful APIs with Node.js and Express, achieving a 30% improvement in response times and enabling 6,000+ additional daily transactions
- Transformed a monolithic application into a microservices architecture using React and Redux, enhancing scalability and maintainability, which improved development efficiency and streamlined deployment processes

Software Engineer *March 2022 – Sept 2022*
Promotehour | **Next.js, React, Redux, GraphQL, Express, PostgreSQL, Jenkins, Docker, AWS** Mumbai, India
- Architected a scalable web app with Next.js and React, enhancing SEO and reducing load times from 5 seconds to 2 seconds, resulting in increased organic traffic and improved user experience for 20,000+ monthly active users
- Implemented state management with Redux to streamline data flow and improve maintainability, achieving a 30% reduction in code complexity and a 25% decrease in onboarding time for new developers
- Integrated GraphQL for efficient data fetching, allowing to request only necessary data, reducing payload sizes by 40% & enhancing rendering performance for interactive components, which significantly improved user interactions

DevOps Engineer *March 2021 – March 2022*
Sigmoid | **Python, Node.js, Docker, Kubernetes, Jenkins, Kafka, Redis, Terraform, AWS, PostgreSQL** Bengaluru, India
- Scaled the core application to support additional 500,000 concurrent users by designing a microservices architecture with Docker and Kubernetes, eliminating single points of failure and reducing downtime by 10 hours per quarter
- Reduced release cycle time from 2 hours to 30 minutes by automating CI/CD pipelines with Jenkins and GitLab, enabling 120 successful monthly deployments with zero critical errors and freeing up 20 developer hours weekly
- Increased real-time data processing capacity by 500,000 events per second by integrating Kafka into backend services built with Python and Node.js, ensuring reliable, low-latency performance for enterprise customers
- Improved API response times from 250ms to 90ms and reduced database load by 50%, supporting 1 million daily active users by implementing Redis and Memcached caching strategies, leading to a 30% reduction in server costs

Software Engineer *March 2020 – March 2021*
Promotehour | **Python, Django, OAuth, React, Git** *Mumbai, India*
- Developed and deployed backend services using Django, integrating with React components, which improved system efficiency and reduced API response times by 40% for over 10,000 daily users
- Created Python-based automation tools that eliminated repetitive tasks, resulting in a 25% increase in team productivity and saving 15 developer hours per week
- Applied gzip compression in our in-house Node.js APIs, alongside efficient data chunking strategies, resulting in a 50%reduction in network bandwidth usage

PROJECTS

LLM-Based Document Search System | Python, Llama-Index, Hugging Face, Pinecone, PyTorch, GenAI
- Built a semantic search system with Llama-Index, Hugging Face, & Pinecone for real-time retrieval across documents
- Automated embedding generation and storage in Pinecone, enabling scalability for datasets up to 1GB with <2-second query times

Full-Stack E-Learning Platform | Django, Next.js, React, Tailwind CSS, PostgreSQL, AWS
- Developed a full-stack e-learning platform using **Django** for the backend and **Next.js** with **React** for the front-end, enhancing user interactions and performance
- Implemented **Tailwind CSS** for responsive design, improving mobile experience and reducing styling time by 30%