

# SAHIL UPADHYAY





# **SUMMARY**

Dynamic Senior Java Developer and Fullstack Engineer with over 6 years of experience in Java full stack and Big Data Analytics, cloud infrastructure, and scalable system design. Adept at leading cross-functional teams to deliver innovative, data-driven solutions that enhance business performance and user experience. Expertise in leveraging AWS, Kafka, and Generative AI to drive automation and efficiency. Committed to fostering a collaborative environment and driving continuous improvement through strategic planning and technical excellence.

## **EXPERIENCE**

**Persistent Systems Limited** 

Aug 2023 - Aug 2024

Engineer Lead

- Architected and optimized front-end interfaces using React (18+), JavaScript, and Bootstrap, applying SOLID principles and design patterns to enhance maintainability and scalability, reducing page load times by 85%.
- Streamlined back-end microservices with Spring Boot, Node.js, and Hibernate, integrating AWS and Kafka for robust data ingestion and real-time processing, ensuring high availability and fault tolerance.
- Implemented CI/CD pipelines using Jenkins, automating deployments with Docker and Kubernetes, accelerating release velocity by 80% and reducing deployment errors by 90%.
- Utilized monitoring tools like Splunk and profilers such as VM Profiler and JProfiler to ensure optimal performance and proactive issue resolution, decreasing server downtime by 75%.
- Key Impact: Leveraged Generative AI (AWS toolkit, Microsoft Copilot) for automated debugging and algorithm analysis, cutting bug resolution time by 65%.

Capgemini

Oct 2021 - May 2023

Professional 2

- Served as a systems architect in an agile environment, applying design patterns and SOLID principles to develop scalable systems, minimizing technical debt and enhancing code reusability.
- Implemented Spring Boot and ReactJS within Docker workflows, integrating with Kubernetes for automated scaling and load balancing, reducing cross-OS discrepancies by 80% and speeding deployment cycles by 90%.
- Migrated applications to AWS and Azure, utilizing Kafka for real-time data streaming and Splunk for monitoring, achieving a 75% cost reduction and enhancing system observability.
- Developed and maintained CI/CD pipelines with Jenkins, integrating automated testing and deployment processes to improve reliability by 80% and support continuous delivery of high-quality software.

**Kent Ro** Nov 2020 - Apr 2021

- Senior Analyst Contract
- Led the development of a data catalog and lineage system using Neo4j, Java, and Docker, integrating Kafka and AWS for scalable infrastructure, enhancing data retrieval and integrity.
- Optimized front-end modules with real-time analytics and VM Profiler, improving page responsiveness by 85% and ensuring a seamless user experience.
- Managed AWS-based systems, integrating MySQL, MongoDB, RabbitMQ, and Kafka to establish reliable data pipelines and efficient data flow across services.
- Automated system administration tasks using PowerShell and Shell scripting, reducing manual processes by 80% through robust CI/CD pipelines with Jenkins.

Cognizant Programmer Analyst - Big Data Developer Dec 2018 - Dec 2019

India

- Enhanced a high-traffic BFSI application by optimizing front-end (HTML5, JavaScript) and back-end (Java, Spring Boot) using design patterns and SOLID principles, increasing throughput by 85%.
- Developed data-centric applications with **Hadoop**, **Hive**, and **Spark**, integrating **Kafka** for real-time processing, speeding data handling by 95%.
- Designed and implemented RESTful APIs using Java and Node.js, integrating with MySQL and utilizing Jenkins for automated deployments, reducing response latencies by 60%.
- Ensured data integrity through algorithmic big data validations and used Splunk for monitoring, achieving near-zero data discrepancies and maintaining compliance standards.

May 2017 - May 2018

India

Associate Analyst - SQL Database Administrator

- Managed and administered SQL databases, ensuring high availability, performance, and security for enterprise-grade systems.
- Performed database design, development, and optimization using **SQL Server**, enhancing query performance by 70% through indexing and query tuning.
- Implemented robust backup and recovery strategies, reducing data loss risks and ensuring business continuity with a 99.9% uptime.
- Monitored database performance using tools like SQL Server Profiler and Splunk, proactively identifying and resolving bottlenecks to maintain optimal performance.
- Automated routine DBA tasks using **PowerShell** and **T-SQL scripts**, increasing operational efficiency by 60% and reducing manual intervention.
- Collaborated with development teams to design and implement database schemas, ensuring data integrity and supporting application scalability.
- Managed data migration projects, seamlessly transferring data between environments with zero downtime and maintaining data accuracy.

COVID Data Analysis Apr 2021 – Dec 2022

Lead Developer

- Extracted live COVID-19 data from Worldometer using **Pandas** (Python) and **Java**, capturing real-time case information with 85%+ improved accuracy.
- Performed advanced data organization (country-wise, region-wise), generating tables and visualizations (Matplotlib) that guided government vaccine strategies.
- Enhanced forecasting models by 80% using a Java-based approach for big data analytics, delivering critical insights to public health institutions.

**Zyla Clothing Startup** 

Nov 2022 - Present

- Fullstack Consultant
- Developed an e-commerce platform using **Node.js**, **Express**, and **React**, increasing sales conversion by 75% through UI/UX optimizations.
- Leveraged MongoDB Atlas for scalable product catalogs, achieving 80% faster load times and a 90% improvement in concurrency handling.

Astra Crypto Coin Mar 2022 – Present

Founder & Lead Dev

- Launched an ERC-20 token with advanced staking, boosting daily active users by 85%.
- Deployed **Solidity** smart contracts with **Truffle** & **Hardhat**, achieving 85% lower transaction fees via optimized gas usage.

Projects on Github 2018 – 2025

Contributor

• GitHub: https://github.com/sahil-lab

#### **EDUCATION**

Lovely Professional University (LPU)

2018

India

B.Tech. in Electronics and Communication Engineering with Minor in Android Development

## **CERTIFICATIONS**

- Google Advanced Data Analytics (2023) Google Business Intelligence (2023)
- Data Analytics with Jupyter IDE Free Code Camp (2022)
- Big Data Data Air (2019, Hadoop 2.x)

### **ACHIEVEMENTS & HONORS**

- TechGig Challenge Winner: Surpassed 1000+ participants with 90%+ superior algorithmic performance.
- PCB Designing Competition: Secured 1st prize for a Solar Mobile Charger, increasing energy efficiency by 80%.
- Crypto Token Creation: Scaled coin to \$42K valuation on launch day; launched NFT collection on OpenSea.
- Outstanding Collaboration: Recognized by offshore clients at Capgemini for a cross-team product release yielding 80% faster deployment cycles.

## **S**KILLS

- > Backend / Big Data: Java, Spring Boot, Node.js, Hadoop, Spark, Kafka, SQL, Neo4j, IBM Mainframe
- > Frontend: ReactJS, Angular (10+), TypeScript, HTML5, CSS, Redux, React 3js fiber, React drei, Next.js, Nest.js
- > Cloud & DevOps: AWS, Azure, Docker, Kubernetes, Jenkins, CI/CD, Git, Splunk, JProfiler, VM Profiler
- > AI/ML: TensorFlow, PyTorch, OpenAI APIs, Scikit-learn, Vertex AI, Basic NLP
- > Soft Skills: Agile/Scrum, Stakeholder Management, Team Leadership, Communication, Problem-Solving

## PORTFOLIO & PUBLICATIONS

- Portfolio: portfolio-resume-sahil.vercel.app
- **GitHub**: https://github.com/sahil-lab
- NFT Collection: opensea.io/collection/brainmine-genesis
- Publications on Medium: https://medium.com/@sahilupadhyay.work
  - Innovative Materials: Self-Cleaning, Color-Changing, Temperature-Regulating Fabric; Ultra-Refractory Materials for Nuclear Protection.
  - Advanced Technologies: Alien Intervention & Simulated Reality; Achieving Human Teleportation Through 3D Organ Bioprinting; Quantum-Enhanced Machine Learning for Teleportation.
  - Sustainable Solutions: Sustainable Architecture with Recycled Rubber; Designing a Geoid Shield.
  - Speculative Concepts: The Puncture Theory; Dimensional Neuroscience & NeuralSignalProcessor; ChronoTunnel & DarkCore Resonance.

## LANGUAGES

- English: Fluent
- Hindi: Native