

# Shivank Bhardwaj

✉ theshivankbhardwaj@gmail.com | 📞 +91-9811701266

🌐 <https://github.com/TheShivankBhardwaj> | 🌐 <https://www.linkedin.com/in/shivank-bhardwaj/>

## Skills

**Languages:** C/C++, Java, Python, JavaScript, TypeScript, SQL

**Technologies & Tools:** Spring Boot, Microservices Architecture, REST APIs, GraphQL, Apache Kafka, Jenkins, CI/CD, Docker, Kubernetes, Terraform, AWS (EC2, S3, Lambda, DynamoDB), GCP (GKE, Cloud Run), Azure AD (OAuth2), MongoDB (Aggregation Pipelines, Atlas Search), MySQL, SQL Server, Redis, Elasticsearch, Spark, Git, Node.js, ReactJS, JUnit, Postman

**AI/ML & RAG Systems:** Python ML Stack (Scikit-learn, Pandas, NumPy), NLP (Transformers), RAG pipelines (LangChain, LlamaIndex), Vector Databases (FAISS, Pinecone), Embeddings, Prompt Engineering, Model Fine-tuning (LoRA), LLM API integration

## Work Experience

**Bidgely, California**

June 2025 - Present

**Software Engineer**

- Owned backend for solar billing and TOU optimization, handling complex rate logic (seasonal, mid-cycle changes) and large-scale historical data to deliver accurate cost and savings insights.
- Designed and scaled event-driven EV telematics and managed charging systems on AWS EventBridge, improving reliability and real-time processing for customer-facing workflows.
- Led migration from Astyanax client to DataStax Java Driver for Cassandra and streamlined core microservices/APIs, improving performance, reducing operational issues, and strengthening system stability.
- Developed internal AI agents using Python and LLM APIs to automate workflows such as log analysis, anomaly detection, data validation, and incident summarization using contextual retrieval and prompt orchestration, reducing manual debugging effort across backend services.
- Built LLM-powered NBI pipelines on top of disaggregation and TOU analytics, generating personalized energy insights from appliance, rate, and weather data at scale; integrated RAG over warehouse data and improved prediction quality using time-series models.
- Java, Spring Boot, Python, AWS (EventBridge, Lambda, SQS, Redshift), Kafka, Cassandra, DataStax, Microservices, REST APIs, CI/CD, Jenkins, Python ML Stack (Scikit-learn, Pandas, NumPy), NLP (Transformers), RAG (LangChain, LlamaIndex), Vector DBs (FAISS, Pinecone), Embeddings, Prompt Engineering, LoRA Fine-tuning, LLM APIs

**BlackRock, Noida**

Nov 2024 - May 2025

**Software Development Engineer**

- Designed and deployed a full-stack Talent Pool Tracking Web App from scratch, enabling real-time workforce tracking and improving resource allocation efficiency within 2 months.
- Engineered a multi-tenant portfolio management system, optimizing data processing, user access control, and enterprise report generation.
- Java, Spring Boot, SQL, Kafka, Azure AD, React.js, Node.js, Jenkins, Git

**Indigo (InterGlobe Aviation) , Gurugram**

Aug 2024 - Oct 2024

**Digital Consultant - Full Stack Developer**

- Built flight data synchronization web systems replacing schedulers, improving data sync performance by 8% and following SOLID principles.
- Integrated Azure Active Directory authentication across multiple applications, replacing legacy login systems and improving login performance by 25%.
- Java, Spring Boot, SQL, Kafka, Azure AD, Git, Jenkins, IntelliJ IDEA

**SDE - 1**

- Developed AI-driven microservices and integrated 3 GDS systems via SOAP APIs, increasing revenue by 13%.
- Built and optimized 35+ REST, GraphQL, and SOAP APIs for airline integrations, improving backend efficiency and achieving an 8% performance gain through better design and error handling.
- Led the successful migration of legacy SQL databases to MongoDB, redesigning optimized schemas and implementing advanced aggregation pipelines, resulting in 20
- Automated CI/CD pipelines using Terraform, Docker, and Kubernetes, improving deployment scalability and reliability.
- Java, Spring Boot, Python, MongoDB, GCP, Terraform, Jenkins, Docker, Kubernetes, CI/CD, MySQL, Snowflake, Power BI, Node.js

**Cognizant Technology Solutions Corporation, Bengaluru**

Jan 2022 - Jun 2023

**Programmer Analyst Trainee**

- Engineered automated data analysis workflows in C, reducing report generation time from 8 hours to 1 hour and improving efficiency by 25%.
- Developed RESTful APIs using ASP.NET Core and implemented automated testing using xUnit, improving reporting speed by 30% and reducing manual testing efforts by 20%.
- Designed interactive web pages using ASP.NET Core, HTML5, CSS3, and JavaScript, improving user engagement by 35% and enhancing client conversion rates.
- Java, Spring Boot, C, ASP.NET Core, JavaScript, React, SQL Server, MySQL, xUnit, JUnit, Jenkins

**Education****KIET Group of Institutions, Ghaziabad**

Aug 2018 - Jun 2022

B.E. in Mechanical Engineering

**CGPA: 7.78/10**

Relevant Coursework: Object Oriented Programming, Databases, Discrete Maths, Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning, Data Mining, Advance Data Structures and Algorithms, Information Retrieval, Image Processing

**Project Work**

- **Word Lookup Dictionary (2017):** Developed a desktop software for online lookup of English words. Implemented efficient search of valid words using Trie data structure. Implemented spelling correction and auto-suggestion using edit distance algorithm. Used web scraping to get the data for online lookup. Python, BeautifulSoup.
- **Alternative-Routes in Road Networks (2019):** Applied Dijkstra's shortest path algorithm to find the fastest route in a road network with dynamically varying traffic. Implemented collision avoidance by adjusting vehicle speeds in simulation. C++, OpenGL.
- **Clustering SSH Attacks (2020):** Applied KMeans clustering to classify SSH attack patterns using network packet (PCAP) data. Tuned optimal K-value and grouped similar attack behaviors using unsupervised learning. Java, WEKA.
- **E-Commerce Platform (2022):** Designed and implemented a scalable backend system using Java, Spring Boot, and SQL Server, improving system reliability and performance. Developed 3+ microservices for user management and payment processing, improving user experience by 20%. Integrated PayPal payment gateway and OAuth 2.0 authentication for secure transactions. Implemented Redis caching, reducing response time by 30%. Achieved 95% unit test coverage using xUnit, significantly reducing production bugs. Java, Spring Boot, Microservices, JPA, SQL Server, Redis.

**Awards and Certificates**

- **Mentor at Scaler Academy:** Helping students and working professionals improve problem solving, coding, and system design skills.
- Data Engineering Nanodegree on Udacity
- Machine Learning and Deep Learning Specialization on Coursera
- **BEST TEAM AWARD:** Universal Weather and Aviation's, Inc. (February 2024) — Recognized for exceptional collaboration, teamwork, and achievement toward shared objectives.
- **NASA BEST DESIGN AWARD:** National Aeronautics and Space Administration (NASA), Huntsville, Alabama (April 2021) — Awarded Neil Armstrong Best Design Award for most realistic, practical, and intuitive design among 85 global teams.