

Shubham Kulkarni

Seattle, WA | 602-570-5459 | skulka86@asu.edu | [linkedin.com/in/shubham9199/](https://www.linkedin.com/in/shubham9199/)
Software Engineer | Java | Python | Machine Learning | Generative AI | APIs and Micro-services

Software engineer specializing in Java (Spring Boot) APIs and microservices, with 2+ years of hands-on development experience and a strong focus on scalable design, reliability, and clean code. At PACCAR, delivered 2 end-to-end ML-driven microservices resulting in \$780K+ savings.

Professional Experience

Software Engineer | *PACCAR, Bellevue, WA*

May 2025 - Present

- Developed backend microservices for **ML-driven recommendations via APIs**, achieving **94%** success and delivering **\$780K** in operational savings.
- Engineered robust **CI/CD pipelines** using **Docker** and **GitHub Actions** for AWS EKS (Kubernetes) deployments, reducing feedback cycles from 4 days to 3 hours.
- Designed and implemented an internal **platform automation service**, cutting engineering report generation time by 60% and manual effort by 98%.
- Contributed to **Next.js frontend integration** with backend services, enhancing user experience and application responsiveness for internal tools.

Software Engineer | *Capgemini, Bengaluru, India*

Nov 2020 – Aug 2023

- Developed and enhanced **Java Spring Boot** backend services, delivering 12+ REST APIs and reducing change turnaround time by 25–35%.
- Implemented **Kafka-based** asynchronous processing in Java, boosting throughput by 76% and improving peak-load stability.
- Automated CI/CD processes with **Jenkins pipelines** (build/test/package/deploy), reducing deployment time by 56% and improving release frequency.
- Contributed to **React-based frontend** development for client-facing applications, focusing on component reusability and performance optimization.

Other Experience

Graduate Teaching Assistant | *Arizona State University*

Jan 2025 – May 2025

- Assisted in teaching Database Management System course to **200+ students** across 3 sessions.
- Held office hours and solved student's queries and issues, demonstrating strong communication and collaboration skills.

Education

Master of Science (Information Technology)

Aug 2023 – May 2025

Arizona State University, Tempe, AZ

CGPA: **3.8/4.00**

- Coursework:** Analyzing Big Data, Advanced Big Data Analysis, Natural Language Processing, Information Systems Development, and Project Management.

Skills

- Languages:** Java, Python, SQL, JavaScript, **TypeScript**
- Libraries & Frameworks:** **Spring Boot**, **NextJS**, React, FastAPI
- Cloud & DevOps:** AWS (EC2, S3, Lambda, API Gateway, CodePipeline), Kubernetes, Docker, Git, GitLab, Terraform,
- Databases:** MySQL, PostgreSQL, DynamoDB, Snowflake
- Testing:** **Junit**, Mockito, Integration Testing, PyTest, Coverage
- Other:** Object-Oriented Programming, Agile Development, Kafka, Code Reviews, System Design, SDLC, SEO

Projects

Predict Solar with AI | *Applied Research Project* | *Flask, React, Plotly, HSDS, AWS S3*

- Designed a Flask-based app to predict solar energy production with 67% accuracy using historical weather & geospatial data from NSRDB (**15+ TB**).
- Integrated an interactive dashboard using Plotly and ReactJS to visualize trends and an **AI-powered chatbot** using GenAI, enabling real-time user interaction via text and voice (WebRTC).

Growezy | *Freelance Project* | **9000+ Users** | *Java, React, BinanceAPI, MongoDB, AWS, Kafka*

- Developed a cryptocurrency trading application with AI-powered signals for options buying, leveraging an RNN model trained on historical market data, serving 9000+ users.