

AYUSH KUMAR SINGH

Software Engineer

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SUMMARY

Results-driven **Software Engineer** with 3 years of experience at Nucleus Software Exports Ltd., contributing to the **FinnOne Neo CAS (Customer Acquisition System)** product. Skilled in **Java, Spring, Spring Boot, Hibernate, and automation frameworks** with expertise in **backend microservices, REST APIs, and CI/CD pipelines**. Proven record of enhancing software quality, streamlining delivery, and building scalable FinTech solutions. Recipient of the **SPOT Award** for innovation in automation frameworks. Passionate about developing secure, efficient, and high-performance enterprise systems.

EXPERIENCE

Software Engineer

Nucleus Software Exports Ltd., Noida — June 2023 – Present

- Worked as a **developer on FinnOne Neo CAS**, focusing on lead management, application processing, and automation modules.
- Developed and maintained **Spring Boot microservices** with **Hibernate, REST APIs, and GraphQL integrations**.
- Enhanced product automation by building a **Java-Selenium-Playwright-Cucumber framework**, reducing manual testing and boosting reliability.
- Built **REST Assured** and **Appium**-based test suites for API and mobile automation, improving regression coverage.
- Created **Java utilities** to automate repetitive testing tasks, cutting execution time and improving team efficiency.
- Designed **FTL** and **JSP**-based dashboards for monitoring and reporting.
- Developed a **cross-platform command execution service** (Windows/Linux/macOS) for distributed automation.
- Implemented **CI/CD pipelines** with **Jenkins, Docker, and Kubernetes**, ensuring consistent and fast deployments.
- Worked on **SSL/TLS-secured integrations**, strengthening application security and compliance.

Cyber Security Intern

Cisco Networking Academy (Virtual) — June 2021 – July 2021

- Designed a **multi-layered secure campus network** using Cisco Packet Tracer, implementing cybersecurity best practices.

PROJECTS

Distributed Testing Framework – Queue-based pull architecture enabling **parallel test execution** with fault tolerance and scalability through messaging queues.

Automation Testing Framework – Designed a unified **Java-TestNG automation suite** supporting **UI (Selenium, Playwright), API (REST Assured), and Mobile (Appium)** testing. Integrated with **CI/CD pipelines** and enhanced with detailed reports and parallel execution.

IoT Smart Bin – Voice-controlled smart bin using **Python + NLP (Naive Bayes, HMMs)** on Raspberry Pi; **Silver Medal at Spark 2021**, incubated by **IIEC-IPEC**, and **published by IP India**.

TECHNICAL SKILLS

Languages: Java, C++, Python, SQL, JavaScript

Frameworks & Tools: Spring, Spring Boot, Hibernate, JSP, FTL, REST Assured, Selenium, Playwright, Appium, Cucumber, TestNG, JUnit, Node.js

DevOps & Cloud: Jenkins, CI/CD, Grafana, Postman, Jira, Maven, Docker, Kubernetes, Git, GitLab, SVN

Technologies: Kafka, MySQL, Apache POI, GraphQL, SSL/TLS, Embedded Servers, Swing UI

Core Concepts: DSA, DBMS, Networks, SDLC, Automation Testing

ACHIEVEMENTS & LEADERSHIP

- SPOT Award** – Recognized for key contributions to the ATDD framework at Nucleus Software.
- 900+ coding problems solved** across LeetCode, GFG, and HackerRank (5-star Problem Solving).
- Vice-President, IIEC-IPEC** – Led innovation and incubation initiatives on campus.

EDUCATION

B.Tech in Computer Science and Engineering

Inderprastha Engineering College, Ghaziabad — May 2023

CGPA: 8.39 / 10