NEELKAMAL RANA

United States ‖ 2066654686 ‖ *nkrneelkamalrana@gmail.com* ‖ *LinkedIn* ‖ *GitHub* ‖ *Portfolio*

PROFILE

MS in Computer Science (May 2025) with 3+ years of experience in Java and Full-Stack development. AWS Certified, skilled in building scalable microservices and ML pipelines with high availability and low latency.

EDUCATION

Pace University, New York, NY Aug 2023 – May 2025
Master of Science in Computer Science
Concentration: Software Development GPA: 3.80/4.0
Courses: Data Structures and Algorithms, Parallel Computing, Artificial Intelligence, Full Stack Development

TECHNICAL SKILLS

Programming: Java (Advanced), Python, JavaScript/TypeScript, C++, MySQL, Android(Kotlin)
Frameworks: React JS, Node JS/Express, PyTorch, Spring Boot, Tailwind CSS
AWS & DevOps: EC2, S3, Lambda, DynamoDB, Aurora, CDN, Fargate, Lightsail, Docker, GitHub Actions
Database: MySQL, MongoDB, PostgreSQL, DynamoDB
Concepts: Object-Oriented Design, Data Structures & Algorithms, Design Patterns, RESTful Services, Distributed Systems, CI/CD, Agile, Scrum, Jira

CERTIFICATIONS

Certified SAFe 6 Agilist	2025
Amazon AWS Certified Cloud Practitioner	2025
Scrum Alliance Certified Scrum Master	2025
HackerRank Certified Software Engineer	2025
HackerRank Certified FrontEnd Developer(React)	2025
HackerRank Certified Problem Solver(Intermediate)	2025

PROFESSIONAL EXPERIENCE

Associate Software Engineer – HCLTech Nov 2021 – Aug 2023
- Led the deployment of a real-time courier tracking module used by 125+ companies, enabling tracking of 60M+ parcel statuses daily.
- Created a reusable JAR for transforming EDI logistics data into JSON/XML, improving data onboarding speed by 30% across 50+ partner systems.
- Migrated codebase from Camel to Java DSL, boosting shipment processing volume from 40M to 60M per day.
- Optimized data retrieval by integrating Redis caching, improving API response time and reducing backend load.
- Redesigned the data pipeline using ELK and RabbitMQ, increasing polling speed from 2K to 5K records/sec and enhancing system load capacity by 60%.

PROJECTS

CyberSentinel *(React.js, Flask, Python, BERT, MongoDB, OpenAI API)* GitHub
- Built an AI-powered cybersecurity platform that detected 95% of phishing and fraud attempts using BERT and Random Forest models.
- Deployed as microservices with JWT authentication, real-time alerts, and horizontally scalable architecture on AWS.
- Enabled security teams to analyze over 10K enterprise emails and visualize phishing patterns during testing.

Attendify *(React, Flask, Python, face_recognition, OpenCV, PyTorch)* GitHub
- Engineered a face recognition-based attendance system with 97% accuracy in identifying participants from uploaded screenshots.
- Incorporated dashboards, face enrollment, real-time summaries, and filters for meetings and virtual events.

MoveEasy *(MERN Stack, React.js, Node.js, MongoDB, Express, AWS)* GitHub
- Developed a full-stack web platform using the MERN stack to connect vehicle owners with customers seeking moving services. Designed an interactive React.js portal enabling user profile creation and location-based mover search.
- Implemented a MongoDB database to manage user authentication and profile data, and integrated Express APIs to streamline front-end and back-end communication, reducing configuration overhead and enhancing scalability.

SkyConnect *(React.js, Spring Boot, Java, Dijkstra's Algorithm)* GitHub
- Created a full-stack web application to calculate shortest flight paths between 500+ airports and 10,000+ using Dijkstra's Algorithm.
- Delivered intuitive routing, total distance calculations, and a modern React frontend.

Swastha Sanchar *(Android Studio, Jetpack Compose, Firebase)* GitHub
- Designed a wellness-focused Android app with Firebase-backed scalability and mobile-first experience.
- Empowered users to organize events, track goals, and engage in community-driven wellness activities.
- Integrated group interactions, multilingual support, and push notifications for continuous engagement.