Neeraj Kumar Singh

Contact

singhn23@montclair.edu
+1 (862) 348-9593

Profiles

www.linkedin.com/in/nrjsingh1
github.com/nrjsingh1

Summary

Software engineer with 8+ years of experience, seeking to pursue a Master's in Computer Science to deepen expertise in intelligent systems and scalable software architecture.

Skills

Java, Spring, PostgreSQL, Hibernate, Kafka, Spark, Web Development, REST, Microservices
Kubernates, AWS, Git, Jenkins, Maven, Jira, Agile

Experience

Here Technologies, Bengaluru , Senior Software Engineer   Sept 2021 - May 2025

Spark Based Road Attribute Automation

- Migrated road attribute automation application from an event-stream-based processing system to a Spark-based batch processing job.
- Reduced processing time from over 24 hours to approximately 4 hours by leveraging Spark's MapReduce architecture and distributing large data loads across multiple worker nodes in AWS EMR clusters.
- Integrated the batch job into the Directed Acyclic Graph (DAG) execution plan, ensuring coordination with upstream and downstream processes for successful execution.
- Delivered multiple attributes across phased releases, ensuring timely delivery and quality.
- Supported the creation of test scenarios, and investigated and resolved UAT and production issues using Spark logs and AWS CloudWatch logs.
- Utilized AWS S3 for input and output data storage, ensuring efficient data access and management.

Event Stream-Based Processing

- Developed an event-driven streaming application using Java, Spring Boot, PostgreSQL, and Apache Kafka to process real-time data efficiently.
- Implemented a blocking queue mechanism to temporarily store incoming events from upstream systems and persist them in an RDBMS for intermediate storage.
- Designed and scheduled event processing workflows to handle events sequentially and publish processed data to downstream consumers.
- Utilized Kubernetes for efficient load balancing and scaling of event processing across multiple pods.
- Developed CI/CD pipelines using GitLab for automated build and deployment processes.
- Leveraged Splunk for log analysis and troubleshooting, ensuring system reliability and quick issue resolution.

Cisco India, Chennai , Software Engineer II   Feb 2020 - Sept 2021

Cisco Cloud Calling

- Designed and implemented RESTful and SOAP-based APIs using Spring Boot and PostgreSQL, ensuring efficient and scalable backend services.
- Integrated REST clients with an Angular-based front-end, facilitating seamless communication between back-end and UI components.
- Developed a Spring-based authentication service to enhance security and user management.
- Automated UI testing using Selenium, improving application reliability and reducing manual testing efforts.
- Designed and implemented CI/CD pipelines using Jenkins as part of DevOps initiatives, streamlining build and deployment processes.
- Upgraded a Spring Boot 1.5.9 project to version 2.3.3, ensuring compatibility with updated dependencies, including Tomcat, JDBC connection pooling, and logging frameworks.

Verizon India, Chennai , Analyst System Developer   July 2019 - Feb 2020

Conversation Manager Tool

- Worked on the backend of a Saas product to design converation flows ,using Java Postgres RESTful services.

Verizon India, Chennai , Software Engineer Developer   July 2016 - July 2019

Wireline Voice Portal - IVR

- Worked as Java developer in Verizon's Voice portal team, focused on enhancing DIY/ self-service and reducing call misdirects.
- Developed menu and DTMF based IVR call flows to provide self-service using VXML (Voice XML) and Nuance grammars.

Angular JS based Metrics Dashboard

- Created Voice Portal Metrics Dashboard, showing the real-time call volumes for different kinds of transaction.

Security Vulnerability Finder Application:

- Java based text scanning tool to scan the application logs to find CPNI based customers sensitive data and mask them before sending to third parties.

Verizon Store Locator App:

- Created webapp to find the nearest Verizon store from the customer location , using Php , CSS , HTML and Google map API.

Computer Science Department, CUSAT , Internship   July 2015 - April 2016

Computer Aided Process Planning, HMT Kochi

- Developed Computer Aided Process Planning python tool to read CAD diagrams of machine tools , using dxfgrabber library
- used RDBMs to store mapping of basic shapes with their planning steps.
- Generated sequence of processes required in manufacturing of machine tools
- Worked in collaboration with Hindustan Machine Tools (HMT Kochi)
- Generated the sequence of processes required in manufacturing of machine tools using their CAD designs, in collaboration with HMT, Kochi.

College Website, School Of Engineering, Kochi

- Developed official website for college - soe.cusat.ac.in , using PHP, HTML , CSS, Jquery , MySql, Tomcat.
- Publish events, news and updates as updated by Admins
- Created profiles for Professors showing published papers and researches. Login and Authentication for all users.

Education

Cochin University of Science & Technology, Kochi ,   2012 - 2016

Bachelor of Technology, Computer Science Engineering

St Michael's High School, Patna, Bihar ,   2009 - 2011

All India Senior School Certificate Examination (AISSCE) (12th), CBSE

Mother's International Academy, Patna, Bihar ,   2009

All India Secondary School Examination (10th), CBSE