Ohm Patel

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Objective

Motivated Computer Science professional with experience in **Java, Spring Boot, Oracle DB, and RESTful APIs**. Skilled in developing and optimizing scalable backend services and APIs in distributed systems, with a focus on system performance, automation, and security. Adept at collaborating with cross-functional teams to design and implement secure, high-performance solutions that meet evolving business needs. Eager to leverage expertise in backend development, and cloud technologies to contribute to innovative projects while continuously enhancing technical capabilities in a dynamic, growth-oriented team.

Education

Rutgers, The State University of New Jersey *Jan 2022 – Aug 2024*
Bachelor of Science in Computer Science
Related Courses: Java Programming, Database Management, Data Science, Computer Architecture, Software Methodology, Systems Programming, Internet Technology, data structures, and algorithms.

Hudson County Community College *Sep 2020 – Dec 2021*
Associates of Science in Computer Science
Related Courses: Java Programming, Discrete Mathematics, Cybersecurity, C++ Programming.

Technical Skills

Programming Languages: Java, SQL (Oracle DB), JavaScript, Python (Pandas, NumPy)
Frameworks & Technologies: Spring Boot, React.js, SonarQube, RESTful APIs
Tools & Security: Git, Jenkins, GitLab, JUnit, CI/CD, Agile, Scrum, Maven
Other Skills: Scalable workflow design, API integration, system design, OOD, Design Patterns

Experience

Hudson County Community College – Software & Systems Engineer *Aug 2022 – Present*

- Developed and maintained **Java-based backend services** using **Spring Boot, React.js, and Oracle DB** in a **distributed system**.
- Designed and implemented **RESTful APIs** to integrate student records with financial databases, **automating data synchronization**.
- Led the development of a feature enabling professors to view students' GPA, collaborating with the PM to create a **UML Software Model** for secure and efficient data flows.
- Improved **system performance** by optimizing **Spring Boot and Oracle DB** queries, **enhancing indexing** for faster data retrieval.
- Integrated **CI/CD pipelines** using **Jenkins and GitLab**, automating deployments and improving development efficiency.
- Ensured secure coding practices, adhering to **FERPA compliance**, implementing role-based access controls (RBAC), and conducting code quality analysis using **SonarQube**.

Projects

Book Finder Full-Stack Development | *Java, Spring Boot, MongoDB, RESTful APIs, JUnit, Spring Security* *May - Aug 2024*

- Developed a scalable book and notes exchange platform using **Java (Spring Boot) and MongoDB**, implementing a microservices architecture to improve modularity, maintainability, and adaptability to evolving user needs.
- Designed and optimized **RESTful APIs** to enable secure data transactions, reducing query latency and enhanced real-time search.
- Implemented **Spring Security** for authentication and access control, ensuring secure API interactions and protecting sensitive data.
- Conducted unit and integration testing using **JUnit** and **H2 database**, validating API endpoints and improving system reliability.
- Integrated **CI/CD pipelines** using **GitLab and Jenkins**, automating deployment and ensuring seamless development workflows.
- Enhanced **database performance** by optimizing queries in **MongoDB**, improving search efficiency and reducing response times.

Social Media Sentiment Analysis and PCA| *Python (Pandas, NumPy, VADER, Matplotlib), SQL* *Feb - Apr 2024*

- Designed a scalable sentiment analysis pipeline using **VADER, Python, and SQL**, processing 10,000+ tweets to classify sentiment and compute polarity scores with 70% accuracy. Ensuring efficient real-time sentiment classification for large datasets.
- Optimized large-scale data processing by leveraging **Pandas and NumPy**, implementing data cleaning techniques such as regex-based text preprocessing, missing value handling, and feature scaling, increasing processing speed.
- Conducted **Principal Component Analysis (PCA)** to extract key linguistic patterns**,** reducing high-dimensional datasets while preserving 80% of variance. Applied feature extraction to enhance data interpretability for sentiment-based trend analysis.
- Analyzed engagement trends by visualizing word frequency distributions, and polarity trends using **Matplotlib**. Identified high-impact keywords and sentiment-driven phrases that correlated with higher user interactions and virality on Twitter.