Niharika Vilas Deshmukh

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SUMMARY:

Computer Science graduate student with **2+** years of experience in **full stack development (Java, React.js)**. Strong Object-oriented programming skills in **Java** and well versed in **Spring Boot**. Experienced in cloud technologies, known for building and delivering high-quality, scalable and modular **RESTful** micro services to enhance user experiences.

SKILLS:

Languages: Java, Python, C, C++, SQL, Go, JavaScript, TypeScript, Solidity, HTML5, CSS.
Web Development: Spring framework, Node.js, React.js, Angular.js, CodeIgniter (PHP).
Databases: MySQL, MongoDB, PostgreSQL, Redis, DynamoDB, Cassandra, Hive, NoSQL.
Infrastructure and Cloud Services: AWS, Azure, Google Cloud Services, Docker, Kubernetes, Elastic Search, Prometheus.
Algorithm & Design: Algorithms, Design Patterns, Object-Oriented Design, Microservices, RPCs, SOLID, SDLC, OOAD.
Testing, Monitoring & Logging: JUnit testing, Mockito, Postman, Grafana, Ganache Truffle, Prometheus, SonarQube.
Version Control & Collaboration: Git, Jira, Confluence, Scrum, Agile methodologies, Jenkins, CI/CD.
Other: Figma, gRPC, Apache Kafka, Spark, Spotlight, JSON, XML, REST, SOAP, MVC, Maven, Spring MVC, JPA, Hibernate.

WORK EXPERIENCE:

OYO Rooms, Bangalore, KA, India   **Software Development Engineer - 1**   **August 2020 - July 2022**
- Developed and led adoption of a **multitenant** in-house ticketing tool by developing **REST APIs, webhooks** and key features like **rich text editor**, **saving around $500k (3500 licenses cost) per year**.
- Built a **Java microservice** by isolating **analytics** and reporting features from existing ticket-management service, achieving a **99.99% system uptime** and minimizing core API latency for improved performance.
- **Integrated Stripe gateway** into **PCI compliant** payment microservice, for **card** terminal **payments**, introducing Instant payouts that guarantee hotel owners access to funds within **30 minutes post a successful charge**.
- Implemented **real-time automation** for ticket **email communication** in a Java Spring Boot application using **Amazon SES** and **S3**, eliminating **100%** of manual intervention to enhance **first response time** in ticketing tools.
- Led development of an **instant wallet refund feature** in Java, reducing refund processing time from **7-14 days** to **1 hour**.
- Executed a stability initiative by configuring liveness and readiness probes to enhance health checks and by integrating **Application Performance Monitoring** and **Grafana** for better **debugging**, and **monitoring** across **20** Java microservices.
  Tech Stack: Java (Spring Boot), Postgres, Redis, MongoDB, React, Kubernetes, AWS (S3, SES, SQS, EC2, RDS, SNS), Azure.

VidyarthiMitra, Pune, MH, India   **Intern - Web Developer**   **May 2019 - July 2019**
- Developed an MVC-based college rank predictor system in Python and PHP, with a user-friendly frontend(react.js) and query processing backend to recommend suitable colleges based on student preferences.
  Tech Stack: Python, PHP, MySql, HTML, CSS, ReactJs libraries, JS, Model-View-Controller (MVC), Postman.

PROJECTS:

Single Threaded Relational Database Management System | Cpp, Relational Database, Query Optimization
- Created a single-threaded RDBMS like PostgreSQL, covering file handling, buffer management, schema, data layout, access and methods, heap files, b-tree indexing, and query processing.

Decentralized Domain Name Marketplace | Solidity, Ether.js, React.js, Heroku, Postgres, AntDesign, web3, Figma, Express.js
- Developed an ERC721-compliant decentralized application with react.js frontend for managing domain name NFTs with Metamask integration, tokenization and a marketplace feature to buy, sell and auction the domain names.

Fault-Tolerant Distributed Key-Value Storage | Go, gRPC, Distributed Systems
- Built a reliable distributed key-value storage system in Go. Implemented the Raft Consensus algorithm to elect leaders and replicate logs, achieving consensus in leader election and log replication for a system consisting of five nodes.

EDUCATION:

Master of Science in Computer Science, **University at Buffalo,** Buffalo, NY, USA   August 2022 - December 2023
Courses: Distributed Systems, Database Systems, Analysis of Algorithms, Blockchain, Reinforcement Learning.   **GPA: 3.74/4**
Teaching Assistant: Introduction to Machine Learning (Spring 23, Fall 23)

Bachelor of Technology in Computer Science, **College of Engineering Pune**, Pune, MH, India   August 2016 - May 2020
Courses: Data Structures, Operating Systems, Computer Networks, Artificial Intelligence, Web Services.   **GPA: 7.15/10**