SHREY SHAH

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Experienced Software Engineer fluent in an array of programming languages and skilled in cross-functional collaboration and coding. Demonstrated success in scaling systems for performance and promoting technical knowledge. Adept at driving innovation and delivering software solutions, staying ahead of technological advancements. Proven record supporting production releases.

EDUCATION

University of Illinois at Urbana-Champaign, USA   **Aug 2022 — May 2024**
Master of Science in Information Management — *4.0/4.0*

Sardar Patel Institute of Technology, **University of Mumbai**, **India**   **Jul 2015 — May 2019**
Bachelor of Engineering in Computer Engineering — *9.72/10.0*

SKILLS

Programming: Python, Java, SQL, Ruby, Shell, HTML/CSS, JavaScript
Frameworks: Spring Boot, REST, AngularJS, Django, Scrum
AI/ML Tools: TensorFlow, Keras, Scikit-learn, NLTK, OpenCV
DevOps: Git, Chef, Jenkins, GitLab, Kafka, OpenShift, Docker

Database: Oracle, MySQL, PostgreSQL, MongoDB, Neo4j
Cloud: Amazon Web Services, Microsoft Azure
Analytics: Excel, R, Tableau, Power BI, Talend
Others: Postman, Eclipse, VS Code, Jira, Confluence

WORK EXPERIENCE

Country Financial — Software Engineer Co-op | Champaign, USA   **Jan 2024 — Present**
- Lead a team of **4** to pioneer solutions for secure and centralized image registry using **Docker**, **GitLab**, and **Azure Registry**
- Remodel the underwriting transaction system delivering **Angular/Spring MVC** website to ensure data load within **20s**
- Formulate a real-time change tracking feature in policy transactions, targeting a **25%** review time reduction
- Engineer a process to collect interns' time and project details to refresh **Tableau** dashboard metrics and mitigate errors

Yahoo — Software Engineer Intern II | Champaign, USA   **May 2023 — Aug 2023**
- Built a CLI to automate **AWS** EMR cluster deployment, minimizing manual effort by **70%** using **Python** and the Boto3 SDK
- Enhanced efficiency and scalability by **35%** using **AWS** services (S3, EC2, IAM) and **Infrastructure as Code** (CloudFormation)
- Incorporated automated GitHub repository and pull request creation to cut setup time by **40%** using **CI/CD**
- Streamlined prerequisite verification from 10+ minutes of manual steps to a **30s** flow with intuitive feedback
- Engineered a **Chef** recipe for systematic installation of automation agent on **50,000+** Hadoop hosts using **Ruby**

Barclays — Technology Analyst | Pune, India   **Jul 2019 — Jul 2022**
- Initiated migration to **OpenShift** v4 for payment inquiry microservice, reducing pod start time by **30%** and adhering to compliance
- Devised **REST APIs** for payment inquiries, achieving **80%** code coverage with **Java/SonarQube**, and promoting coding standards
- Developed **Spring Boot**-based payment validation service using Agile methodology to transform and validate payment data fields
- Enabled workload virtualization to VMs involving MQ changes, file transfer, and configuration management via **Chef** to facilitate resiliency, consistency, and horizontal scaling
- Transformed monolithic Java payment processing application to **microservices** with **Kafka**, achieving **10x** performance improvement
- Optimized **Oracle SQL** queries, improving load processing efficiency by **25%**, and utilizing AppDynamics for real-time monitoring
- Collaborated with the Level 2 team to ensure seamless releases to production, ensuring zero critical issues post-deployment, and mentored the team through knowledge transfer sessions for Chef technology
- Automated CI/CD leveraging **Jenkins**, **Git**, and **Shell** scripts to refine the software build pipeline and support **1-click** deployment

Barclays — Intern Analyst | Pune, India   **May 2018 — Jul 2018**
- Designed 6 test scenarios for trade booking models with **JUnit** and **Test Driven Development** lowering defect rate by **10%**
- Programmed a **Java** module for an in-house trading utility, simplifying fields and enabling interconversion of 9 message types

PROJECTS & PUBLICATIONS

FLAIR: Finding Loyalists & Analyzing Item Relations [Link]   **Oct 2023 — Dec 2023**
- Analyzed 541K+ transactions to identify loyal customers and frequent item purchasing patterns. Evaluated K-Means++, DBSCAN for clustering, and Apriori, FP-Growth algorithms for association rule mining using Python

Vogue Vaani [Link]   **Jun 2023 — Aug 2023**
- A Streamlit application to recommend top 5 similar fashion items, with image augmentation on 44K+ images via OpenCV. Attained an F1 score of 0.88 using ResNet50 model, enhancing computational efficiency through Annoy

Leetcode Problem Search Application [Link]   **Apr 2023 — May 2023**
- A Django web app for Leetcode problem retrieval with a 200ms response time. Secured CRUD operations via role-based access control on AWS Aurora PostgreSQL, optimizing database for 99.9% uptime and a $10,000 annual cost reduction

Wireless IoT based Solution for Women Safety in Rural Areas (doi: 10.1109/ICCES45898.2019.9002392)   **Feb 2020**

LEADERSHIP & VOLUNTEERING

- MS/IM Program Committee Representative: Assisting in application reviews, proposing unique courses, and voicing concerns
- Represented the Payments Hub Team at the Barclays 2022 Tech Expo, discussing the adoption of microservices architecture
- Teaching Assistant to Principal Prachi Gharpure, facilitating lectures, labs, and guiding students in Programming Methodology course