## SHREY SHAH

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## **EDUCATION**

University of Illinois at Urbana-Champaign, USA

Masters of Science in Information Management (Data Science and Analytics)

Aug 2022 – May 2024

Sardar Patel Institute of Technology, India

Bachelor of Engineering in Computer Engineering

Jul 2015 - May 2019

GPA - 3.9/4.0

GPA - 4.0/4.0

## **TECHNICAL SKILLS**

LanguagesPython, Java, R, SQL, HTML/CSS, Ruby, Shell Scripting, C++ML/AnalyticsPyTorch, Keras, Tableau, PowerBI, Jupyter, Power Query, TalendDatabases/FrameworksMySQL, PostgreSQL, Oracle, MongoDB, Neo4j, Spring Boot, Django

Tools/Platforms IDE, Postman, Git, Chef, AutoSys, Kibana, AppDynamics

Others Jenkins, OpenShift, Kafka, JIRA, Confluence, AWS, Jinja, Agile/Scrum

#### **WORK EXPERIENCE**

## University of Illinois at Urbana-Champaign

Mar 2023 – Apr 2023 Champaign, USA

Center of Innovation in Teaching and Learning - Data Analyst

- Modeled a solution to redact PII and flag inappropriate responses with 20% accuracy using Python NLTK
- Created accessible HTML reports to depict college survey findings via R markdown automation
- Constructed dashboards to illustrate climate survey results and demographic summaries using Tableau
- Formulating custom weighting function for survey response statistics using R and Power BI M functions

Yahoo

May 2023 – Aug 2023 Champaign, USA

Software Engineering Intern

- Built a CLI to automate Amazon EMR cluster deployment, decreasing manual effort by 60% using Python
- Boosted operational efficiency and scalability by 35% by leveraging AWS services and boto3 SDK
- Designed a template immersing users in editor mode for EMR cluster configuration to their choices via Jinja
- Incorporated automated Git repository, branch and pull request creation cutting setup time by 40% using CI/CD
- Streamlined verification process with lucid feedback to troubleshoot and replace 10+ minutes to 30 seconds
- Engineered a recipe for dynamic installation of automation agent on 50000+ Grid PE hosts using Chef

## **Barclays Global Service Center**

Jul 2019 - Jul 2022

Software Engineer

• Worked on OpenShift PaaS v3 to v4 migration for payment search microservice to reduce pod startup time by 30%, add

security vulnerability scanning, and create v4 compatible jobs

- Acted as SME for payment search REST APIs and increased code coverage to 80% benchmark using Spring Boot
- Migrated from monolithic to event-driven microservices architecture with 10x performance increase using Kafka
- Configured payments logs with business error codes for alerts using ELK and efficient retrieval in Kibana
- Developed 5-6 user stories for payment validation service, integrating alerts, AutoSys, and AppDynamics
- Enhanced SQL queries for non-functional test performance to reduce fetch time by 25% using Oracle Explain Plan
- Virtualized physical workloads to improve resiliency and horizontal scaling with configuration management via Chef
- Automated CI/CD pipelines for 1-click deployment in multiple environments using parameterized Jenkins jobs
- Collaborated with Level 2 team for successful deployment to production environment with live issue remediation

Software Engineering Intern

May 2018 – Jul 2018

- Developed test scenarios for trade booking models using Cucumber, JUnit, and Behaviour Driven Development
- Mapped 9 message types, including fields and interconversion formats, for COBOL based TradeRT utility using Java

## **PROJECTS and PUBLICATIONS**

# **Fashion Apparel Classification System**

Jun 2023 - Present

- Examined existing datasets and selected one consisting of over 3000+ coloured images featuring fashion apparel
- Performed image augmentation and preprocessing to enhance data quality, quantity and generalizability using keras
- Obtained a current accuracy of 68% using the CNN-based ResNET architecture Transfer Learning technique

## **Leetcode Problems Search Engine**

Apr 2023 – May 2023

- Created a web application for quick retrieval of Leetcode problems based on user preferences using Django ORM
- Implemented secure CRUD operations along with access control mechanism via database roles in AWS Aurora database
- Illustrated database fail-over, data replication, backups, and backtracking with annual cost estimation

## **Wafer Sensor Fault Detection**

Aug 2021 - Nov 2021

- Validated training data against schema and used KMeans clustering for customised ML approach using sklearn
- Trained XGBoost and RandomForest models using GridSearchCV tuning and chose model based on AUC score
- Achieved an overall accuracy of 82% on the prediction dataset and deployed the application on Heroku

# Wireless IoT based Solution for Women Safety in Rural Areas

**IEEE 2019** 

• ICCES, Coimbatore, India, 2019, pp. 232-237, doi: 10.1109/ICCES45898.2019.9002392