

SHREY SHAH

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EDUCATION

University of Illinois at Urbana-Champaign

Masters of Science in Information Management (Data Science and Analytics); GPA – 4.0/4.0

Aug 2022 – May 2024

Champaign, USA

Sardar Patel Institute of Technology, University of Mumbai

Bachelor of Engineering in Computer Engineering; GPA – 3.9/4.0

Jul 2015 – May 2019

Mumbai, India

TECHNICAL SKILLS

Programming Languages	Python, Java, R, SQL, HTML/CSS, Ruby, Shell Scripting, C++
ML/Analytics	PyTorch, Keras, Tableau, PowerBI, Jupyter, Power Query, Talend
Databases/Frameworks	MySQL, 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

Center of Innovation in Teaching and Learning – Data Analyst

Mar 2023 – Present

Champaign, USA

- Modeled a solution to redact PII and flag inappropriate responses with 50% 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

Software Engineering Intern

May 2023 – Aug 2023

Champaign, USA

- Built a CLI to automate Amazon EMR cluster deployment, decreasing manual effort by **70%** 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

Software Engineer

Jul 2019 – Jul 2022

Pune, India

- 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**
- Developed **5–6** user stories for payment validation service integrating alerts and efficient retrieval via **ELK** stack
- Migrated from monolithic to event-driven microservices architecture with a **10x** performance increase using **Kafka**
- 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

Jul 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 **PyTorch**
- Obtained a current accuracy of **68%** using the **ResNet CNN** classification model with computational efficiency

Forbes & NYSE Company Data Analysis, Exploration, Visualization

Apr 2023 – May 2023

- Harmonised 4 datasets – **NYSE**, **Forbes** companies and prices with **Python** and **Talend ETL** into **1M+** rows dataset
- Built intuitive dashboards – **YoY Profit** change, stock trends, share volatility, geographical spread via **Tableau**

Leetcode Problems Search Application

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 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](https://doi.org/10.1109/ICCES45898.2019.9002392)