

# SHREY SHAH

(447) 902-1978 | [sshah023@illinois.edu](mailto:sshah023@illinois.edu) | [LinkedIn](#) | [Github](#) | [Portfolio](#) | Champaign, IL

## EDUCATION

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

**Aug 2022 — May 2024**

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

**Jul 2015 — May 2019**

## 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, MSSQL, 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**

**Jan 2024 — Present**

- Lead a team of **4** in developing secure and centralized image registry solutions utilizing **Docker**, **GitLab**, and **Azure Registry**
- Implement **GitLab** pipeline to conduct vulnerability scanning with integrated alerting to distinguish secure and compromised images
- Remodel underwriting transaction system, delivering **AngularJS/Spring** website to ensure **20s** data load time, and create navigable interface for tracking policy changes targeting a **25%** review time reduction
- Engineer a **Python** script for ingesting and preprocessing interns' project and time data to refresh **Tableau** dashboard metrics

**UIUC — Research Data Analyst | Champaign**

**Mar 2023 — Nov 2023**

- Evaluated a solution for redacting PII and flagging sensitive survey responses with **50%** accuracy via **Python NLTK**
- Constructed climate survey summary dashboards in **Power BI**, resulting in **35%** increase in customer engagement
- Resolved Qualtrics survey **API**-related issues, significantly reducing batch email sending time from 1000ms to **20ms**

**Yahoo — Software Engineer Intern II | Champaign**

**May 2023 — Aug 2023**

- Built a CLI to automate AWS EMR cluster deployment, minimizing manual effort by **70%** using **Python** and Boto3 SDK
- Enhanced efficiency and scalability by **35%** using AWS services (S3, EC2, IAM), and created CloudFormation templates (Infrastructure as Code) for IAM role provisioning
- Integrated GitHub repository creation and pull request functionality, cutting setup time by **40%** using **CI/CD**
- Streamlined prerequisites verification from 10+ minutes of manual steps to a **30s** flow with intuitive feedback
- Delivered a **Chef** recipe for systematic installation of an automation agent on **50,000+** Hadoop hosts using **Ruby**

**Barclays — Software Engineer | Pune**

**Jul 2019 — Jul 2022**

- Initiated migration to **OpenShift** v4 for payment inquiry application, reducing pod start time by **30%** adhering to compliance
- Devised **REST APIs** for payment inquiry service with concise documentation, achieving **80%** code coverage with **Java** and **JUnit**
- Developed **Spring Boot**-based payment validation service, transitioning from monolithic to **microservices** architecture with **Kafka**, achieving **10x** performance improvement, employing **Agile** methodology
- Optimized **Oracle SQL** queries, improving load processing efficiency by **25%**, and using AppDynamics for real-time monitoring
- Enabled workload virtualization to VMs involving MQ changes, file transfer, and configuration management via **Chef** to facilitate resiliency, consistency, and horizontal scaling
- Automated CI/CD utilizing **Jenkins**, **Git**, and **Shell scripts** to refine software build pipeline and support **1-click** deployment
- Collaborated with Level 2 team to ensure seamless releases to production with zero critical issues, and mentored a team of **50+** through knowledge transfer sessions for Chef technology

**Barclays — Intern Analyst | Pune**

**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. Examined 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, using image augmentation on 44K+ images via OpenCV. Attained 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 200ms response time. Secured CRUD operations via role-based access control on AWS Aurora PostgreSQL, optimizing database for 99.9% uptime and \$10,000 annual cost reduction

**Wireless IoT based Solution for Women Safety in Rural Areas** (doi: [10.1109/ICCES45898.2019.9002392](https://doi.org/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