225 Cedar St
Seattle WA 98121

ALI A. RAZA

+ 1 (636) 675-6295
aaraza1995@gmail.com

EMPLOYMENT

Lead Software Engineer **Bank of America** **May 2023-Present**

- Led architecture, design, and implementation of high-performance authentication services with 99.9% availability safeguarding $1.9 trillion in assets for 20 million unique daily customers
- Established and guided a global engineering team from the ground up to transform online banking architecture from monolithic on-premise applications to cloud-based containerized microservices, enhancing scalability and agility
- Reduced annual vendor costs by $2 million by integrating an in-house machine learning model and rules engine to the Authentication logic for subsidiary brands including Merrill Lynch and Benefits Online.
- Spearheaded an organization-wide initiative to consolidate data from independent sources into a centralized data lake, significantly enhancing data processing, analysis, and visualization capabilities.

Software Engineer II **Bank of America** **Feb 2019-May 2023**

- Developed and integrated a machine learning model using a one class SVM to detect behavioral anomalies during login, enhancing security and fraud detection capabilities
- Created distributed data processing jobs with Apache Spark, leveraging Spark Streaming for real time processing and batch jobs for persistent data analytics, enabling real-time analytics and enhancing data driven decision making
- Built a dynamic rules engine using class loading to retrieve business logic from Groovy classes stored in a database, enabling the processing of new business rules without code changes or redeployments
- Owned and maintained multiple backend services written in Java with Spring MVC, exposed as RESTful APIs for functions including credential management, password resets, and risk analysis for high-value transactions

Software Engineer **Cerner Corporation** **Jan 2018-Feb 2019**

- Built ETL pipelines using Java and Hadoop that combined medical records from disparate sources across the healthcare industry to build holistic and comprehensive electronic medical records (EMRs)
- Created efficient batch data processing job that filtered/searched through massive healthcare datasets identifying at risk patients, greatly improving preventative care across entire communities

EDUCATION

Columbia, MO **University of Missouri** **Aug 2013-Dec 2017**

- B.S.C. in Computer Science. GPA: 3.4; In-major GPA: 3.7.
- Coursework: Operating Systems; Databases; Algorithms; Programming Languages; Calculus III
- Activities: Research Assistant at MU Institute for Data Science and Informatics; TA for CS 3380: Databases

TECHNICAL EXPERIENCE

Projects

- **iDAS Library:** Developed a user-friendly data mining library in Scala/Spark for researchers at MU Informatics Institute, featuring implementations of classic algorithms such as K-Means Clustering and Apriori, along with novel algorithms, to support researchers with limited programming experience.
- **Disclosure:** Senior capstone project focusing on classification and sentiment analysis of newspaper articles.
- **Mac Dev:** Automates the setup of development environment on new OS-X based machines using Ansible.

Languages and Technologies

- **Programming Languages:** Java, Python, Scala, C++,
- **Frameworks:** Spark, Kafka, Spring MVC/Spring Boot
- **Databases:** SQL, PLSQL, Cassandra/CQL, Redis
- **Technologies:** Unix/Linux, Git, Ansible, Jenkins