Prasidh Aggarwal

linkedin.com/in/prasidhagg | paggar10@asu.edu | +1(929)6136103 | prasidh-agg.github.io | Tempe, AZ

EDUCATION

Master of Science in Computer Science *Graduation Date: May 2024*
Arizona State University, Tempe, AZ *GPA: 4/4*
Experience: Teaching Assistant - MAT 117,142; Grader - MAT 210,242, 265, 267

Bachelor of Technology in Computer Engineering *Graduation Date: August 2020*
Manipal Institute of Technology, India *GPA: 3.89/4*
Minor in Computational Mathematics (Graph Theory, Computational Probability, Time series)

SKILLS

Languages: Java, JavaScript, Python, C, C++, Bash, SQL, HTML, CSS
Frameworks: J2EE, Spring boot, JUnit, Mockito, Spring MVC, React, Node, D3.js
Tools: Git, GitHub, REST, AWS Lambda, AWS EC2, AWS SQS, DynamoDB, Apache Kafka, OpenStack, Docker, K8s, Gradle
Databases: MySQL, PostgreSQL, MongoDB
Certifications: AWS Certified Cloud Practitioner (Credential), FCC Responsive Web Design (Credential)

PROFESSIONAL EXPERIENCE

Deloitte **Bangalore, India**
Software Engineer 2 *Feb 2022 – Apr 2022*

- Accelerated the deployment of Microservices and Applications through streamlined pipelines built using **JIRA**, **Concourse CI**, **Jenkins CI**, and **ArgoCD** for Banking Suite, which increased the development and deployment efficiency by 90%.
- Customized an integration between the **AWS Parameter store**, **AWS Secrets Manager**, **Docker**, and **Spring boot** for the Banking Suite **DevOps** team, which enabled rolling restarts and automatic properties refresh for microservices, with 0 application downtime.
- Integrated an AI-powered risk engine (Feedzai) with Deloitte's in-house Banking Suite product, flagging fraud transactions, and alerting the users via text/e-mail.

Deloitte **Bangalore, India**
Software Engineer 1 *Sept 2020 – Feb 2022*

- Designed, coded, and deployed 80+ **REST APIs** (ACH payments, credit card transactions, loan management, event notifications, transaction fraud detection, etc.) for the Banking Suite using **Java**, Spring boot, built using the **Microservices** architecture on US banking cores - Mambu, Finxact, and Salesforce, which facilitated achieving four project MVPs.
- Collaborated with the product management teams to commence the SDLC cycle by designing 50+ **UML** diagrams, 250+ test cases using **JUnit**, **Mockito**, and Open-API contracts using **Swagger** for REST APIs.
- Successfully launched loan origination and management microservice, facilitating streamlined loan applications, refinancing, rescheduling, and amendments for 5000+ users with an 80% reduction in internal API calls.
- Implemented an integration between **AWS MSK** and **Apache Kafka**, which commissioned an event-driven architecture for vendor notifications (specifically ACH and Credit cards) and reduced the API response times by 90%.

PROJECTS

Data Visualization VAST Challenge 2022 | *Bootstrap, JavaScript, D3.js, Node.js, SQLite* | Link (Req. access) **Fall 2023**

- Designed an interactive dashboard with 7 interactive visualizations/charts to analyze trends in urban mobility and lifestyles of the people of Ohio using D3.js and SQLite schemas to optimize response times for 15k+ data records.
- Enhanced user experience by implementing tooltips and legends to provide chart details on demand, reducing opacity on selections.
- Coordinate project planning and development for a six-member team following Agile methodology with biweekly deliverables.

Cluster Validation – Meal Data Analysis| *Python, Pandas, Scikit-learn,* | Link **Spring 2023**

- Designed end-to-end data pipeline in Python for clustering and analysis of 15K+ meal glucose readings to uncover trends in a person's daily carb intake based on gathered CGM and Insulin data.
- Compared DBSCAN and KMeans revealing DBSCAN had higher accuracy for irregular meals and implemented automated pipeline for large-scale analysis to uncover personalized carb intake patterns from glucose data.
- Implemented preprocessing, feature engineering, clustering (KMeans, DBSCAN), to group meals into seven carb categories.

Handwritten Digit Classification using Mobile Offloading | *Java, Python, TensorFlow, NodeJS, Android Studio* | Link **Fall 2022**

- Engineered mobile application for handwritten digit recognition using one master smartphone and four slave server devices, halving image processing time by 50% through distributed processing and optimized image segmentation.
- Orchestrated distributed ML models on 4 devices, one each for 4 quadrants of segmented image, achieving 75% faster predictions by training on subsets of MNIST and improving inter-device communication by 60%.