

# Prasidh Aggarwal

[linkedin.com/in/prasidhagg](https://www.linkedin.com/in/prasidhagg) | [pagggar10@asu.edu](mailto:pagggar10@asu.edu) | +1(929)6136103 | [prasidh-agg.github.io](https://github.com/prasidh-agg) | Tempe, AZ

## EDUCATION

### Master of Science in Computer Science

Arizona State University, Tempe, AZ

Experience: Teaching Assistant - MAT 117,142; Grader - MAT 210,242, 265, 267

Graduation Date: May 2024

GPA: 4/4

### Bachelor of Technology in Computer Engineering

Manipal Institute of Technology, India

Minor in Computational Mathematics (Graph Theory, Computational Probability, Time series)

Graduation Date: August 2020

GPA: 3.89/4

## 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, JIRA, Confluence, REST, AWS Lambda, AWS EC2, AWS SQS, DynamoDB, Apache Kafka, OpenStack, Docker, K8s, Gradle, Linux, Unix, Data Structures and Algorithms, MySQL, PostgreSQL, MongoDB

**Certifications:** Amazon Web Services Certified Cloud Practitioner ([Credential](#)), FCC Responsive Web Design ([Credential](#))

## PROFESSIONAL EXPERIENCE

### Deloitte

Software Engineer 2

Bangalore, India

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.
- Analyzed transaction risks and integrated an AI-powered risk engine (Feedzai) according to industry trends, with Deloitte's in-house Banking Suite product, flagging fraud transactions, and alerting the users via text/e-mail.
- Received the Deloitte USI Applause award 5 times for outstanding contribution to client work and the firm.

### Deloitte

Software Engineer 1

Bangalore, India

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 4 core project MVPs.
- 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%.
- Collaborated with the product management teams to commence the SDLC cycle by designing 50+ UML diagrams, 250+ test cases using JUnit and Mockito, that increased overall code coverage by 90%. Maintained technical documentation using Open-API contracts (Swagger) for REST APIs, that allowed streamlined API integrations for both frontend and backend teams.
- 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.

## 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 (grouped bar, horizontal bar, bee-swarm, spatial) to analyze trends in urban mobility and lifestyles of the people of Ohio using D3.js and SQLite schemas that helped optimize response times for 15k+ data records.
- Coordinated project planning and development for a six-member team following Agile methodology with biweekly deliverables, exhibiting excellent communication skills.
- Enhanced user experience by implementing tooltips and legends to provide chart details on demand, reducing opacity on selections.

### 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 20% higher accuracy for irregular meals. 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 7 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%.