

RAJ SUDHARSHAN VIDYALATHA NATARAJAN

San Jose, CA • sudharshann05@gmail.com • +1 (408) 549-6981 • [linkedin.com/in/sudharshann05/](https://www.linkedin.com/in/sudharshann05/) • [GitHub](https://github.com/rajsdev) • rajs.dev

SUMMARY

Experienced Software Developer specializing in backend development with a deep understanding of Python, Django, and Flask frameworks. As an AWS Certified Solutions Architect, coupled with my data engineering skills, I have designed and implemented a range of scalable solutions combining back-end systems with cloud environments. Seeking a Backend Software Development Engineer role where I can further leverage my python expertise, driving outstanding results in technology integrations and solution delivery.

CERTIFICATIONS / ACHIEVEMENTS

- [AWS Certified Solutions Architect – Associate](#) Validity: July 2020 – July 2023
- Won 2nd place at Google DSC Hackathon hosted by Northeastern University.

SKILLS

Programming Languages: Python, Java, JavaScript, Dart, HTML, CSS

Frameworks/Libraries: Django, Flask, React, Flutter, NumPy, Pandas, Scikit, Matplotlib, Pygame

Databases: AWS RDS, Aurora, Redshift, SQL Server, PostgreSQL, MySQL, MariaDB, SQLite, Supabase, Firestore

Cloud: AWS (EC2, Lambda, SQS, SNS, S3, API Gateway, CloudWatch, Glue, Data & Code Pipeline), Firebase

Tools & Others: JSON, REST API, OAuth, JWT, Git, Unit Testing, JIRA, BMC Remedy, Power BI, Docker, Unicorn

WORK EXPERIENCE

E2 Infosystems | *Python Developer* August 2021 – December 2021

- Led the successful migration of the backend of a healthcare application from PHP to Django, resulting in improved system performance and stability, handling traffic of more than 10,000 users per day.
- Developed an auto-assigning mechanism for sensor devices using Python Django ORM & DB transactions, streamlining device allocation, and naming processes and reducing manual effort by 80%.
- Designed and implemented a real-time mobile device tracking feature and an on-demand report generation module, improving auditing and decision-making process.

Wipro Technologies | *Software Developer* May 2019 – November 2020

- Collaborated with engineers and designers in solving complex backend issues, contributing to enhanced application reliability and uptime.
- Oversaw backend operations of banking applications through various SDLC stages, including coding and testing, ensuring optimal performance and Service Level Agreement adherence.

EDUCATION

Northeastern University, California | *MS in Computer Software Engineering* Expected December 2023

PROJECT EXPERIENCE

[DineQ](#) ([Square Devpost Hackathon](#)) June 2023

- Spearheaded the development of DineQ, a comprehensive dining solution introducing a virtual queue system, in-app ordering, and digital tab using Django Rest Framework, Square API, PostgreSQL, and Flutter.
- Engineered a virtual queue feature within the app, enabling customers to view real-time seating availability and join queues remotely, contributing to a 30% reduction in wait times.
- Integrated geofencing and Google Maps API for enhanced restaurant discovery, and leveraged Square API for seamless order placement, payment, invoice, and inventory management, significantly improving the dining experience.

[Real-Time Cloud Data Pipeline](#) February 2023

- Engineered a scalable, serverless cloud-native data pipeline on AWS to process millions of real-time transaction data, ensuring every order is processed and stored efficiently for business analytics and reporting purposes.
- Implemented an SQS queue-triggered system for efficient data processing, using API Gateway, SQS, and Lambda, ensuring seamless data flow and integrity from collection to storage.
- Devised a CloudWatch rules-based system to transfer data from RDS to Redshift every 15 minutes, enabling efficient data analysis, cost-effective reporting, and swift dashboard updates.

[TrailTrack](#) (Google DSC Hackathon) December 2023

- Developed and deployed TrailTrack, a user-friendly real-time emergency reporting web app with location tracking capabilities.
- Implemented a push notification system using Firebase that alerts parents if their child strays beyond a custom threshold distance, improving child safety and user satisfaction.