

Gowtham Chandrasekaran

+1 (669) 204-1307 | gowtham6309@gmail.com | [LinkedIn](#) | [Github](#) | gowthamchandrasekaran.com

EDUCATION

San Jose State University

Master's in Computer Science - G.P.A: 4.0/4.0

San Jose, California

08/2021 - 05/2023 (Expected)

Anna University

Bachelor's in Computer Science - G.P.A: 8.2/10.0

Chennai, India

08/2015 - 04/2019

PROFESSIONAL EXPERIENCE

Tata Consultancy Services

05/2019 - 05/2021

Software Engineer

India

- Constructed React components on a server health monitoring dashboard to visualize CPU usage rate, Disk Capacity Usage, Network throughput that improved the readability of metrics.
- Programmed AWS Lambda functions and RESTful APIs to access server health metrics from AWS DynamoDB and analyzed them using Amazon Forecast to predict server failures.
- Implemented a 2-factor User authentication page that performs password and OTP verification which improved the security using Angular and NodeJS.
- Created concept mockups and wireframes that increased overall client satisfaction and implemented them in the production environment.
- Developed unit tests using TDD with Enzyme to ensure code quality and prevent regressions.
- Collaborated with cross-functional teams, including UX designers, product managers and DevOps engineers, to deliver high-quality projects on time and within budget.
- Oversaw migration of a monolithic application to cloud hosted microservice using Springboot and REST APIs
- Worked in Agile/Scrum methodology, using JIRA for project management

PROJECTS

Driver Distraction Detection [Computer Vision]

- Built a Convolutional Neural Network model to detect distractions while driving and crafted a scoring mechanism for the drivers that can be used by insurance companies to set pricing plans to avoid gender/age bias.

Face Mask Violation Detection [AWS Lambda, SQS, RDS, S3, ECS, Load Balancer] [Github Link]

- Built a highly available and scalable web application to detect face mask violations in an uploaded video using AWS Rekognition.

Handover Optimization in 5G Network Using Reinforcement Learning [Q Learning] [Github Link]

- Wrote a paper and implemented a solution that optimized the number of handover connections in a self-developed 2D grid world environment having 5G antennas using Q Learning.
- Leveraged Intel OneAPI for boosting the performance by parallel processing.

Optimal Logistics Routing for Drones [Github Link]

- Implemented a time and resource-efficient solution to find the optimal route for drones to deliver from a warehouse to different locations using the concept of the traveling salesman technique.

Targeted advertising [Mahout] [Github Link]

- Collected multiple consumer emails and used Mahout to cluster users based on their interests by analyzing the most frequent terms used in the emails and then target advertisements to each group.

TECHNICAL SKILLS

- **Front-end:** React, Angular, JavaScript, HTML, CSS, Tailwind
- **Back-end:** Node.js, Express, Python, Express, RESTful API
- **Database:** PostgreSQL, MySQL, BigQuery, MongoDB
- **AWS services:** S3, DynamoDB, RDS, Lambda, Elastic Load Balancing, EC2, ECS, Rekognition, Forecast
- **Tools:** Git, AWS, Heroku, JIRA, Bitbucket, Docker, Kubernetes, Ansible
- **Methodologies:** Agile, Scrum, TDD

CERTIFICATIONS

- SAFe® 4 Practitioner
- Google Fundamentals of Digital Marketing