

# Gagan Deep Gopalaiah

San Diego, CA | +1-(858)-228-7439 | [ggopalaiah@ucsd.edu](mailto:ggopalaiah@ucsd.edu) | [linkedin.com/in/gdgopalaiah-26](https://www.linkedin.com/in/gdgopalaiah-26) | [github.com/ggopalai](https://github.com/ggopalai)

## EDUCATION

### University of California, San Diego

Master of Science in Computer Science, GPA 4.0/4.0

La Jolla, CA

Sept 2022 - Mar 2024 (Expected)

### Rashtreeya Vidyalaya College of Engineering

Bachelor of Engineering in Computer Science, GPA - 9.13/10.0

Bangalore, India

Aug 2015 - May 2019

## TECHNICAL SKILLS

**Languages and Libraries:** Python, Golang, JavaScript, Java, C/C++, SQL, HTML, CSS, ReactJS

**Developer Tools, Databases and Frameworks:** Git, AWS, Azure, Docker, CircleCI, Terraform, Kubernetes; MySQL, PostgreSQL, DynamoDB, Elasticsearch, MongoDB; Node.js, Next.js, SpringBoot, FastAPI, gRPC;

## RESEARCH EXPERIENCE

### Graduate Research Assistant

Apr 2023 - Present

Systems and Networking Group, UC San Diego

La Jolla, CA

- As part of c3lab (Carbonless Cloud Computing Lab), played a pivotal role in the development of a sophisticated platform aimed at scheduling autograder containers with a strong emphasis on carbon efficiency.
- Tech Stack - Python, Bash Scripting, Docker, Kubernetes, PostgreSQL, MQTT, AWS - EKS, VPC, ECR, S3, IAM

## PROFESSIONAL EXPERIENCE

### Software Engineer/Cloud Intern

Jun 2023 - Present

LitePoint

San Diego, CA

- Currently working on integrating a cloud-based testing platform for wireless chipsets on Azure, which involves designing, developing, and maintaining robust web services to enhance the availability of testing software for customers.
- Tech Stack - JavaScript, TypeScript, Python, Next.js, Node.js, Azure, ReactJS

### Software Engineer - II

May 2021 - Jul 2022

Cisco Systems Inc.

Bangalore, India

- Worked on building an authentication and authorization framework for Cisco CX Cloud which was used by multiple downstream teams impacting over a 100 customers. Integrated this framework with Okta to implement RBAC (Role-Based-Access-Control) and secure CX Cloud APIs with OAuth2.0 industry standard.
- Owned and designed backend services related to internal roles and resources. Developed RESTful Golang API endpoints as part of these services before hosting them on AWS.
- Tech Stack - Golang, Okta, OPA, Docker, AWS - DynamoDB, S3, SQS, Lambda, ECS, ECR

### Software Engineer

Jul 2019 - Apr 2021

Cisco Systems Inc.

Bangalore, India

- Implemented new features and enhancements following Agile methodologies in Optimal Software Version Recommendation (OSVR) and the Business Critical Services (BCS) teams. Drove technical discussions across different teams for cross-functional features leading to faster and coherent requirement specifications.
- Tech Stack - Python, Java, AWS, FastAPI, Elasticsearch, Docker, CircleCI

## ENGINEERING PROJECTS

### Surfstore - a Dropbox clone

- Built a robust file synchronization application in Go using a sophisticated key distribution system based on consistent hashing for optimal performance. Integrated the Raft consensus algorithm to ensure fault tolerance and reliability.

### TCP Chat Server - [GitHub](#)

- Utilizing the Go and concurrent programming techniques including goroutines, developed a highly performant, multithreaded TCP chat server enabling multiple clients to connect, communicate, and participate in chat rooms.

## LEADERSHIP AND TEACHING EXPERIENCE

### Graduate Teaching Assistant

Sep 2022 - June 2023

University of California, San Diego

La Jolla, CA

- Teaching assistant for the CSE 110 Software Engineering and CSE 134 Web Client Languages courses, where I was responsible for managing and leading 6 teams of students (totaling 60 students) in their course project. In addition, I led lab sessions and held office-hours where I provided instruction and assistance with software development assignments.