

Santosh Muthukrishnan

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

Bachelor of Computer Science
Grad. May 2025 | Cum. GPA: 4.88/5.0

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Exchange Program, Fall 2023

LINKS

linkedin.com/santosh-muthukrishnan

santoshmuthukrishnan.com

github.com/santosh3007

COURSEWORK

Data Structures and Algorithms
Software Engineering
Computer Networks
Information Security
Operating Systems
Database Systems

SKILLS

PROGRAMMING

Experienced

Java | JavaScript | TypeScript | Ruby | HTML | CSS | SQL | Elixir | Python

Familiar

C | C++ | Scala

TECHNOLOGIES

Experienced

React | Rails | Phoenix | Git | Docker | Tailwind CSS | AWS ECS | AWS RDS | Figma | AWS Glue | NestJs

Familiar

Express | Airflow | Spark | AWS Lake Formation | Databricks

ACTIVITIES

- NUS Greyhats – Core Team (CTFs)
 - Organising security workshops

AWARDS

2023 Top 100 Google Solutions Challenge

2022 Awardee NUS Dean's List

WORK AUTHORIZATION

- Singapore Citizen
- Eligible for H1B1 Singapore Visa with separate quota from limited H1-B pool

EXPERIENCE

[ASANA](#) | SOFTWARE ENGINEERING INTERN (DATA INFRASTRUCTURE)

May 2023 – Present | San Francisco, United States

- As part of the Core Data Infrastructure team, taking part in cross-functional efforts in maintaining critical data infrastructure, distributed systems, and orchestration tools that Data Engineers and Scientists rely on for analysis.
- Assisting with developing Airflow operators to query data in data lakes from pipelines with Databricks, to be used across more than 15 engineering and data science teams.

[SOURCE ACADEMY](#) | SOFTWARE ENGINEER

Jan 2023 – Present | Singapore

- Designed and implemented a notifications framework using Bamboo, Elixir and Phoenix ensuring extensibility across various notification mediums, helping over 1,000 students and educators every semester across the world.
- Revamping background job processing using Oban and Elixir, ensuring fault-tolerant execution, and extensive tracking and monitoring of jobs.

[GOOGLE DEVELOPER STUDENT CLUBS](#) | SOFTWARE ENGINEER

Aug 2022 – Present | Singapore

- Creating an online learning platform for Dyslexic Association of Singapore that is engaging and customised to dyslexic students' learning needs by using a multi-sensory approach.
- Developing a progressive web application using React, NestJS and Recoil.

[CVWO](#) | SOFTWARE ENGINEERING INTERN

May 2022 – Aug 2022 | Singapore

- Led a team of four developers to conceptualize and develop an application for senior citizens to sign up for activities at Ageing Centres, reducing the workload of volunteers using React, Ionic, Ruby on Rails.
- Implemented enhanced authentication with SingPass to allow seniors to use our application securely and in a hassle-free way.
- Spearheaded backend upgrade from Rails 5 to 6 and Ruby 2.5 to 2.7, ensuring zero regressions and improving performance and security of Lions Befrienders' system, currently being used by over 2,500 staff, serving over 20,000 seniors.

TEACHING

DATA STRUCTURES AND ALGORITHMS (CS2040S)

PROGRAMMING METHODOLOGY (CS1101S)

Fall 2022, Spring 2023

- Conducting weekly tutorial sessions on computational problem analysis, design and implementation of efficient algorithms using different data structures.
- Grading programming assignments for each student and providing feedback on code quality and correctness.

PROJECTS

[ECOQUEST](#)

- A community-based game that promotes sustainable living by engaging users in activities with machine learning for object detection to validate user submissions
- Top 100 finalist for Google Solutions Challenge 2023

[RECYCLOPS](#)

- A progressive web application that uses machine learning with image recognition designed to determine whether an item is recyclable.
- Winner of NUS LifeHack '22 Hackathon and built in 24 hours using React, Redux, Ionic, Flask and PyTorch.