

# Raivat Shah

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## EDUCATION

### NATIONAL UNIVERSITY OF SINGAPORE

#### BComp in Computer Science (Distinction)

University Scholars Programme  
Grad July 2022

## SKILLS

### LANGUAGES

- Python • C++ • Swift • SQL
- Go • Javascript • Haskell

### FRAMEWORKS & TOOLING

- React JS • Git • Unix/Linux
- Docker • Express

## LINKS

Github:// [raivatshah](#)

LinkedIn:// [raivats](#)

Medium:// [@raivat \(Python Articles\)](#)

## COURSEWORK

Data Structures and Algorithms  
Operating Systems  
Programming Language Implementation  
Computer Organisation  
Programming Languages  
Database Systems

## TEACHING

Software Engineering Project (C++):

Fall '21

Operating Systems (C, Linux):

Fall '21

Quantitative Reasoning (Python):

Fall '19, Spring '20, '21

## AWARDS

**2021 NUS Hack & Roll**

Top 8 Prize for project Cruiser Cursor

**2020 NUS STePS Best Project**

1st Prize for CS3244 Machine

Learning Project

**2019 Laidlaw Research Scholarship**

Worldwide leadership and research programme

**2017 IIT Mathegon**

2nd position in a Math Contest at the Indian Institute of Technology,

Gandhinagar

## EXPERIENCE

### ROCKET ACADEMY | INSTRUCTOR

Feb - June 2022 | Singapore

- Co-trained a bootcamp class for full-stack web development (**React JS, SQL**)
- Taught basic data structures and algorithms (**Python**)
- Provided feedback on student projects and programming exercises

### GARENA | SOFTWARE ENGINEER INTERN

May - Aug 2021 | Singapore

- Researched the live streaming stack and its protocols (**HLS, RTMP, SRT**)
- Designed and implemented infrastructure to measure glass-to-glass and server-to-client latencies in the iOS app (**Python, Swift, AVPlayer, NTP**)
- Implemented UI features for the BOOYAH! iOS App (**Swift, Functional Reactive Programming, CoreData**)

### PAYPAL | SOFTWARE ENGINEERING INTERN

May - July 2020 | Singapore

- Designed and implemented new APIs and User-Interfaces for an internal tool used for external payment partners (**ReactJS, NodeJS and MySQL**)
- Streamlined the data pipeline for API error logs to reduce time spent on stack trace analysis (**Python**)

## PROJECTS

### NUS CLASSBOT | AUTOMATE ATTENDANCE TAKING IN CLASSES

Feb 2019 - Present | Singapore

- Worked with two other students to create a Telegram Bot that automates the attendance taking process in NUS classes (**Python, Redis, Telegram API, AWS**)
- **Used by more than 2700 students** at NUS over four years

### SOURCE-RPC | REMOTE PROCEDURE CALLS FOR SOURCE ACADEMY

January - April 2021 | Singapore

- Developed a library to **share functions and data** between independent programs for an online IDE (Source Academy) (**Typescript, Firebase, Async Programming**)
- Implemented remote procedure calls, allowing one program to execute functions defined in another program with an **overhead of less than 500 ms**

### CRUISER-CURSOR | CHROME EXTENSION

January 2021 | Singapore

- The extension predicts the button or link the user wants to click based on mouse trajectory, saving time and effort while browsing
- Worked on the algorithm for prediction based on mouse movement (**Javascript**)
- Conceptualized and built under 24 hours for NUS Hack & Roll 2021 (Top 8 Prize Winner)

## EXTRACURRICULAR

### TEDXNUS 2019 | CO-LEADER, ORGANIZING COMMITTEE

August 2019 - April 2019 | Singapore

- **Co-led** a team of 30+ students to organize 2019's TEDxNUS event
- Managed logistics, social media promotions and **built a website for the event** (HTML, CSS and Javascript)