

TAN YUANHONG

Computer Science & Applied Mathematics Undergraduate at NUS

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EXPERIENCE

Undergraduate Research Assistant

N-CRIPT (NUS Centre for Research in Privacy Technologies)

May 2019 – Present Singapore

- Built a decentralized OAuth 2.0 service for mobile devices to liberate user's data from the cloud. [GitHub Link](#)

Software Engineering Intern

Shopee

May 2020 – July 2020 Singapore

- Interned at core server team. Mostly worked on the dynamic image generation micro-service - a Golang server application that generates images from JSON requests.
- Increased throughput by 45 percent, decreased latency by 30 percent. Improved project documentation and code quality to greatly enhance the maintainability, etc.

Backend Engineer Intern

ByteDance

May 2021 – Aug 2021 Singapore

- Interned at Business Integrity team. Built a API service and companion Python library/CLI from scratch. The service later becomes one of the backbones of SG BI team, and I played an important role in transitioning the project from a solo-contributor simple proxy service into a multi-contributor API service that supports our business logic.

PROJECTS

(all available on my [GitHub page](#))

MarkBind (A static site generator)

- A tool for generating content-heavy websites from source files in Markdown format and more, battle-tested by powering a module's e-book website
- Created with Node.JS and a custom Vue.JS component library

Fluminus App

- a Flutter Rebuild for LumiNUS (NUS Learning Management System)

ACTIVITIES

Undergraduate Teaching Assistant

National University of Singapore

Feb 2019 – Present Singapore

- CS1101S Programming Methodology
- CS1231 Discrete Structure

Core Team Member

NUS Hackers

Jan 2019 – Present Singapore

- NUS Hackers is a student-run organization committed to the spread of hacker culture&free/open-source software.

EDUCATION

Bachelor of Computing

National University of Singapore

August 2018 - Present

- Major in computer science with artificial intelligence focus area
- CAP (Cumulative Average Point): 5.0 out of 5.0

Bachelor of Science

National University of Singapore

August 2019 - Present

- Major in applied mathematics
- Double degree program
- CAP (Cumulative Average Point): 5.0 out of 5.0

HONORS & AWARDS

2018 ICPC Asia Singapore Regional, Honorable mention

as one of the few year-one NUS teams that advanced to the 2018 Singapore regional.

Module Recommendation Letters
CS2040 DS&Algo, CS2100 Computer Organization, CS2105 Intro to Computer Networks, CS2106 Intro to OS, CS3282 Thematic Systems Project II

Dean's List - AY19/20 Semester 1

rank within the top 5% of their cohorts at the end of each semester.

Dean's List - AY19/20 Semester 2

rank within the top 5% of their cohorts at the end of each semester.

Science & Technology (S&T) Undergraduate Scholarship (NUS)

SM2 Scholarship (MoE)

SKILLS

Backend development

- Python, Golang, MySQL, Redis, Docker, K8s

Mobile development

- Flutter, Dart

Full-stack web development

- JavaScript, HTML/CSS, Node.JS, Vue

Scientific computing

- R, MATLAB, PyTorch and basic machine learning