

# Sun Yitao

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[sunyitao7@gmail.com](mailto:sunyitao7@gmail.com)

## EDUCATION

### NATIONAL UNIVERSITY OF SINGAPORE

BComp in Computer Science  
(Turing Programme)

Second Major in Mathematics

Expected May 2023

Cum. GPA: 4.61

Conc. in Theory & Algorithms

## LINKS

Github: [github.com/sun-yitao](https://github.com/sun-yitao)

LinkedIn: [linkedin.com/in/sun-yitao](https://www.linkedin.com/in/sun-yitao)

## COURSEWORK

### UNDERGRADUATE

Data Structures & Algorithms

Software Engineering

SWE for Digital Markets

Operating Systems

Computer Networks

CS Research Methodology

Quantum Computing

Combinatorics & Graphs

Programming Methodology

(Teaching Asst)

## SKILLS

### PROGRAMMING

Proficient:

Python • Swift • Golang • Java

Familiar:

C++ • JavaScript • PostgreSQL

Docker • Shell •  $\LaTeX$

### FRAMEWORKS

PyTorch • TensorFlow • Scikit-Learn

iOS • Gin • Flask • Express

Hadoop • Spark • Hive

PostgreSQL • Redis • Docker

### GENERAL

Software Engineering

Backend Development

Linux

Machine Learning

Computer Vision

Natural Language Processing

Recommendation Algorithms

Data Visualisation

## EXPERIENCE

### SHOPEE | SOFTWARE ENGINEER INTERN

May 2021 – Aug 2021

- Implemented Alibaba's SWING algorithm for item-item similarity using Golang, Hadoop and Spark.
- Researched on recommendation algorithms, query relevance, search ranking and presented findings to team.

### RAKUTEN VIKI | IOS ENGINEER INTERN

Apr 2020 – Jul 2020

- Implemented new homepage with redesigned navigation bar and content cards.
- Implemented Facebook login and analytics using Facebook API.
- Refactor API queries to use Result type introduced in Swift 5.

### SHOPEE | DATA SCIENCE INTERN

Apr 2019 – Jul 2019

- Developed a framework that was put into production to identify overlapping product categories using NLP methods.
- Researched methods for product attribute tagging, multi-modal and extreme multi-label classification models.

### XRVISION | MACHINE LEARNING INTERN

Nov 2018 – Apr 2019

- Improved image classification and localisation models.
- Implemented deblurring, antispoofing and contrast enhancement algorithms for the facial recognition platform.

## PROJECTS

### UROP | BENCHMARKING D-WAVE ADVANTAGE ON QUBOS

Jan 2021 – Present

Worked with **Prof. Rahul Jain** to benchmark the latest generation D-Wave Advantage quantum computer on quadratic unconstrained binary optimisation problems.

### ORBITAL - ARTEMIS (EXTREME) | RANKATHON

May 2020 – Aug 2020

Rankathon is a hackathon managing platform similar to Devpost. It provides a mobile-friendly UI for judging and automatically sorts the winners for each category through a normalised ranking algorithm. I developed the backend using Golang containerised with Docker.

## AWARDS

2020 2<sup>nd</sup>

Jane Street Electronic Trading Competition: **Github**

2020 1<sup>st</sup>

IOT Datathon: **Medium Article**

2019 1<sup>st</sup>

CS1101S 3D Runes Contest

2019 Top 10/1200

AI For SEA Challenge Finalist: **Github**

2019 2<sup>nd</sup>/359

National Data Science Competition: **Kaggle Post**

## SOCIETIES

2020 - Present

NUS Hackers Coreteam

2019 - 2020

NUS Statistics Society Project Director