

https://www.sunvitao.com/ sunyitao7@gmail.com

### **FDUCATION**

## 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 LinkedIn: 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
- Implemented Facebook login and analytics using Facebook API.
- Refactored API calls to make use of modern Swift 5 language features.

### **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: <b>Github</b>
2019	2 <sup>nd</sup> /359	National Data Science Competition: Kaggle Post

# SOCIFTIES

2020 - Present NUS Hackers Coreteam 2019 - 2020 **NUS Statistics Society Project Director**