

Sean Ng

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

B. COMP. (COMPUTER SCIENCE)
UNIVERSITY SCHOLARS PROGRAM
 Expected May 2021
 CAP: 4.70/ 5.0

NATIONAL JUNIOR COLLEGE HIGHSCHOOL

Grad. 2014
 Graduate Speaker

LINKS

Github:// [pengnam](#)
 LinkedIn:// [pengnam](#)

COURSEWORK

Distributed Systems and Algorithms
 Information Retrieval
 Machine Learning

SKILLS

PROGRAMMING

Most experience in:

Python | Golang

Experienced:

Java | Javascript | C

Frameworks & Tools:

Kafka | Elasticsearch | Lucene |

React | Django | Rails | SQL |

NoSQL | PostgreSQL | Redis | Unix

| Tensorflow | Docker | Kubernetes |

Hadoop

TEACHING

Data Structures and Algorithms
 Programming Methodology

AWARDS

- 2019 Faculty Honour Roll
- 2019 Academic Writing Award
- 2019 1st place AI project showcase
- 2018 2nd place NUS Datathon
- 2014 Graduate Speaker
- 2012 Silver - Singapore Math Olympiad
- 2012 Silver - APCYS

EXPERIENCE

GOOGLE | SOFTWARE ENGINEERING INTERN

Sep 2019 - Dec 2019 | Mountain View

- Worked on a dashboard used by executives to profile ads performance. (SQL)
- Worked with a team to build an internal tool that will be used by several thousand people. Received positive feedback from teammates and all code pushed to production. (Angular, TypeScript, Bazel, Java)

SEA(SHOPEE) | SOFTWARE ENGINEERING INTERN

May 2019 - Aug 2019 | Singapore

- Designed and implemented **search service** for empty search results that serves **10% of search traffic** in Southeast Asia's largest ecommerce platform. (Elasticsearch, Golang, Hadoop)
- Worked on **distributed streaming library** used by **all of team's core products**. (Kafka)
- Designed and implemented **stress tests**, experimented to determine new **search system cluster design** that can handle **200% of the previous capacity**. (Elasticsearch, Ansible)

99.CO | SOFTWARE ENGINEERING INTERN

May 2018 - Aug 2018 | Singapore

- **Developed and deployed** company's data pipeline system, actively in use by company's data team. Over **50% faster** than previous system. (Airflow, Python)
- **Developed tools** that collect application metrics, alert staff during **server or data failure**. (Python)

COMPUTATIONAL CHEMISTRY RESEARCH | RESEARCHER

Jan 2010 - Dec 2014 | Singapore

- Simulated models using shell scripting and machine learning techniques.
- Published paper in **Scientific Reports, Nature**, presented at conferences.

PROJECTS

CINNABOT | RESIDENTIAL ASSISTANT

Residential assistant that disseminates announcements to topic subscribers, provides a feedback channel, and provisions useful information such as bus times. Used by about **140 users per week, 0 downtime**. (Golang, telegram)

GANDALF | REAL-TIME VISUALISATION OF ALL AIRCRAFTS

Web dashboard that displays, in real-time, positions of all aircrafts in the world. **Microservices based** architecture with Docker, Kafka, websockets, DeckGL for front-end.

NATIONAL UNIVERSITY OF SINGAPORE DATATHON | 2ND PLACE

Created machine learning models that predicted timeseries data with **93% accuracy** with no lag using **stacked autoencoders and MLP**.

TAXIBROS | WEB DASHBOARD FOR TAXI TRAVELS

Web application that determines a better location to hail a taxi, and **display statistics and relevant graphs** for routes. (Django, GoogleMaps API, D3.js)