

# Sean Ng

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## EDUCATION

### NATIONAL UNIVERSITY OF SINGAPORE

B. COMP. (COMPUTER SCIENCE)  
SECOND MAJOR IN STATISTICS  
UNIVERSITY SCHOLARS PROGRAM  
Expected Dec 2020  
CAP: 4.81 / 5.0

### NATIONAL JUNIOR COLLEGE HIGHSCHOOL

Grad. 2014  
Graduate Speaker

## LINKS

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

## COURSEWORK

### COMPUTER SCIENCE

Distributed Systems and Algorithms  
Information Retrieval  
Machine Learning

### STATISTICS

Bayesian Inference  
Regression Analysis  
Monte Carlo Methods

## SKILLS

### PROGRAMMING

Familiar:

Python | Golang | Java

Experienced:

Kafka | React | Django | SQL | NoSQL |  
Linux | C | Javascript | Tensorflow |  
Docker |

## AWARDS

2019 Faculty Honour Roll  
2019 Academic Writing Award  
2019 1<sup>st</sup> place AI project showcase  
2018 2<sup>nd</sup> place NUS Datathon  
2014 Graduate Speaker  
2012 Silver - Singapore Math Olym.  
2012 Silver - APCYS

## EXPERIENCE

### SEA(GARENA) | SOFTWARE ENGINEERING INTERN

May 2019 - Present | Singapore

Interning under SEA, one of the leading tech companies in South East Asia.

- Search, indexing, and distributed systems related projects
- Designed and implemented **search service** that serves **10% of search traffic** in Southeast Asia's largest ecommerce platform. (Elasticsearch, Golang, Hadoop)
- Implementing **distributed tracing, improving streaming platform**. (Golang, Elasticsearch, Kafka)

### 99.CO | SOFTWARE ENGINEERING INTERN

May 2018 - Aug 2018 | Singapore

Property tech start-up funded by Sequoia, 500 Startups and Eduardo Saverin.

- **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)

### NATIONAL UNIVERSITY OF SINGAPORE | TEACHING ASSISTANT

Jan 2018 - Present | Singapore

- **Conducted tutorials** to undergraduate students, marked assignments, **created missions used by over 400** students yearly.

### 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

Used by about **140 users per week, 0 downtime**. (Golang, Systemctl)

### GANDALF | REAL-TIME VISUALISATION OF ALL AIRCRAFTS

**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

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

### KAGGLE | DATA SCIENCE COMPETITIONS

**Top 20%** in various competitions. (Python)