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

Most experience in:
Java | Python | Golang
Experienced:
Kafka | Elasticsearch | Lucene | React | Django | SQL | NoSQL | Unix | C | Javascript | Java | Tensorflow | Docker

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 Olym.
2012 Silver - APCYS

EXPERIENCE

SEA(GARENA) | Software Engineering Intern

May 2019 - Present | 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**, integrated **distributed tracing**. (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)

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

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)