

RANALD LAM YUN SHAO

UNDERGRADUATE STUDENT IN COMPUTER SCIENCE AT NATIONAL UNIVERSITY OF SINGAPORE.

EXPERIENCES

- 2019**
Technical Operations, Intern
Jump Trading 📍 Singapore & Chicago, USA
 - Participated in operations of the Trading Infrastructure team
 - Worked on internal tools with the Network Team and simulation technologies with the R&D department
 - Assisted with planning and deployment of servers & network equipment in different datacentre/co-locations.
- 2017 | 2019**
Teaching Assistant
School of Computing, National University of Singapore 📍 Singapore
 - Data Structures and Algorithms (CS1020 & CS2040 & CS2040C), 10 iterations
 - Database Systems (CS2102), 1 iteration
 - Competitive Programming (CS3233), 1 iteration
 - Honour List for Student Tutors in AY 2017-18
- 2017**
Software Engineer, Intern
Garena Online Pte Ltd (now Sea Group) 📍 Singapore
 - Developed a web application for the HR department to co-ordinate meal orders for internal staff and external guests. In use by at least 300 staff members daily.
 - Worked on API backend for an internal translation tool that is in use by multiple projects. Improved the workflow of translation tasks for multiple offices in the region.
- 2017**
Intern
TinkerTanker Pte Ltd 📍 Singapore
 - R&D for BBC micro:bit. Developed various Microsoft PXT packages for hardware components.
 - Primary and assistant trainer for Python, micro:bit, Arduino, Raspberry Pi classes in primary and secondary schools.

PROJECTS

- 2013 | now**
mrJudge Online Judge (<https://dunjudge.me>)
 - Developed a web app which automatically executes and grades student's code with a set of pre-defined testcases.
 - Maintained infrastructure to support 500,000 submissions, 1400 tasks, 200 concurrent users (on a low budget).
 - Technologies: AWS Lambda, S3, Ansible, Percona Database Cluster, PHP, SQL, Nodejs, Web
- 2018**
Collaborative IDE with external comments - gg=G
Judge's Choice (Apollo 11) in CP2106 Independent Software Development Project - Orbital
 - Developed an interactive web IDE that supports real-time updates and external comments (Google Docs style). Useful for teaching staff to share code to students while typing
 - Technologies: Nodejs, MongoDB, Web
- 2014**
Zenstorage
1st Runner's up in Hackatron Asia Singapore 2014
 - Utility tool designed to merge different cloud storage systems into one unified storage drive.
 - Encrypted chunks are distributed across different cloud storage platforms in a redundant manner similar to 'RAID-5'. Tolerates the loss or accidental deletion of files in one cloud storage platform.

EDUCATION

- 2017 | 2020**
Bachelor of Computing (Honours) in Computer Science
National University of Singapore (NUS) 📍 Singapore
 - Focus Areas: Algorithms and Database Systems
 - Notable modules: Database Systems Implementation (CS3223), Competitive Programming (CS3233), Parallel and Distributed Algorithms (CS4231), Optimization Algorithms (CS4234)

AWARDS

- 2017 | 2018**
ACM International Collegiate Programming Contest (ACM ICPC)
 - Champion Team in Asia Nakhon Pathon Regional Contest (Team Pandamiao), Rank 1/69 📍 Thailand, 2018
 - Champion Team in Asia Manila Regional Contest (Team Pandamiao), Rank 1/35 📍 Philippines, 2017
 - Top 10 in Asia Jakarta Regional Contest (Team Pandamiao), Rank 6/180 📍 Indonesia, 2017
- 2012 | 2014**
International Olympiad in Informatics (IOI)
 - Gold Medal, Rank 24/311 📍 Taiwan, 2014
 - Silver Medal, Rank 48/299 📍 Australia, 2013
 - Bronze Medal, Rank 91/310 📍 Italy, 2012

CONTACT INFO

- 🌐 [codeclaws](https://codeclaws.com)
- 🌐 [linkedin.com/in/ranaldmiao](https://www.linkedin.com/in/ranaldmiao)
- ✉ ranaldmiao@gmail.com
- 📞 [+65] 8322-8031

SKILLS

- C & C++
- Python & Django
- Golang
- Java
- PHP
- HTML & CSS
- Javascript & Nodejs
- SQL & DB Clusters
- Bash

- Basic Unix Server Admin
- AWS Lambda
- Ansible
- Nginx Reverse Proxy Setup
- Docker & Jenkins
- Database Design
- Algorithms