

MELVIN KOK

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Credit-Bearing Internship Availability: December 2020 - May 2021 (23 weeks)

EDUCATION

Nanyang Technological University May 2018 - **May 2022** (Expected)

- Bachelor of Engineering (Electrical and Electronic Engineering)
- **Honours (Merit)** (Expected)
- Relevant Modules: (1) Introduction to Data Science and Artificial Intelligence
(2) Data Structures and Algorithms (3) From Computational Thinking to Programming

ACADEMIC PROJECTS

Predicting Probability of Olympian Winning Medal Oct 2019 – Nov 2019

NTU-EEE Module: Introduction to Data Science and Artificial Intelligence

- Developed Probability Prediction Model for Olympics 2020 using **Python** on Anaconda platform
- Deployed *Imputing* to enhance model prediction probability (e.g. rectifying data “integrity”) upon Machine Learning Algorithm (i.e. **XGBoost**) application
- Successfully simulated outcome by developed model based on “historical” dataset (1910 – 2010) of Olympic Medal Winners to predict upcoming Olympics 2020

PERSONAL PROJECTS

Hsi-Illustration (www.hsi-illustration.com) Apr 2020

- Developed web application using **Flask** for users to shop for customized watercolor portraits
- Implemented storage solution for orders using **PostgreSQL** and **AWS S3**

INTERNSHIP

Thales Group, Software Engineer Intern May 2020 – Present

Internship Project: Web Application

- Designed and implemented data plotting tool using **Python** and **JavaScript**, served with **Nginx**
- Developed and maintained data processing backend that handles **1TB+** of data daily
- Reduced time taken for root cause analysis of issues by **90%**, leading to faster responses to customers
- Presented and demonstrated to management, system engineers, and software engineers
- Liaised with development team in Toronto for joint product development sprints

NATIONAL SERVICE

Republic of Singapore Navy, Underwater Combat Medic Nov 2016 – Jan 2018

- Built reputation among superiors for strong situational awareness and excellent communication skills
- Provided front-line medical service for acute appendicitis patient over 12 hours readily (e.g. measured vitals, administered medication / drips) with stable condition intact
- Worked under pressure in time-critical situation to treat patient having anaphylaxis (i.e. severe allergic reaction with difficulties breathing)

LEADERSHIP & CO-CURRICULAR ACTIVITIES

NTU Hall 1 Hall Council, Financial Secretary Sep 2019 – Present

- Analyzed past expenditure as benchmarking / referencing to manage current finances for Hall 1 operation; allocated approved budget to respective 10 committees with solid justification
- Assume role as Main Liaison to coordinate with Student Affairs Office for reimbursement claims upon valid receipts / invoices submitted by 10 committees
- Involved actively in assets sourcing and procurement for Hall 1

NTU Hall 1 Junior Common Room Committee, Social Secretary Sep 2018 – Aug 2019

- Led 8 team members to organize Joint-Hall Halloween Event within compressed time; successfully participated by 400 residents
- Planned, organized, executed and implemented social activities for hall residents’ cohesiveness
- Managed the Hall Cheerleading Team, and initiated fund raising to support team’s training expenses

NTU Foodcraft & Fermentation Club, *Events Director*

Sep 2019 – Present

- Drafted proposals and conducted regular Culinary Workshops for every class comprising 20 students
- Initiated to improve hygiene protocols by including detailed steps on sanitizing equipment for participants

TECHNICAL SKILLS

Computer Languages	Python, JavaScript, HTML, CSS, SQL, C
Frameworks & Libraries	Pandas, Numpy, Flask, Scikit-learn, Bootstrap
Tools	Git, Docker, Azure, GitLab CI/CD, LaTeX
Programs	LabVIEW, MATLAB, Microsoft Office 2019