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EDUCATION

Nanyang Technological University (NTU) Aug 2018 – **May 2022** (Expected)

- **Bachelor of Engineering (Electrical and Electronic Engineering)**
- **Honours (Merit)** (Expected)
- Specialisation: **Info-communications Engineering (Data Intelligence & Processing)**
- Relevant Coursework: (1) Data Structures & Algorithms (2) Computer Vision (3) Artificial Intelligence & Data Mining (4) Pattern Recognition & Machine Learning (5) Machine Learning Design & Applications (6) Intelligent Systems Design

PROFESSIONAL EXPERIENCE

Resync Technologies – Data Scientist Jun 2021 – **Apr 2022**

- Implemented a Hidden Markov Model in Python for disaggregating energy consumption
- Expected to design and implement MLOps pipeline for Data Science team

Thales Group – Software Engineer Intern Jan 2021 – May 2021

- Automated cleaning and processing of over 200GB of daily data using Python, Pandas and NumPy, deployed using Docker, Gitlab CI and Kubernetes
- Developed dashboards using Kibana for previously inaccessible data insights and visualisation

Thales Group – Software Engineer Intern May 2020 – Aug 2020

- Spearheaded project for custom full-stack data analysis web application built using Flask and Pandas for backend processing, and Plotly in JavaScript for frontend visualisation rendering
- Deployed web application across 5 ground transport projects internationally using Gitlab CI and Kubernetes
- Reduced over 150 man-hours annually for root cause analysis of technical issues

ACADEMIC PROJECTS

Deep Generative Model for Remote Sensing Aug 2021 – **Apr 2022**

- Use *Generative Adversarial Networks* (GANs) to transfer large-scale optical RGB images to desired imaging modalities e.g., SAR

Improving Deep Learning Accuracy Using GANs (GitHub) Aug 2020 – Nov 2020

- Improved classification accuracy of *Convolutional Neural Network* (CNN) using images generated by *Generative Adversarial Networks* (GANs) built using PyTorch
- Achieved **4.7%** increase in average accuracy through unconventional combination of GAN methods
- Won **Top 2** among 16 teams in competition for best Deep Learning and Machine Learning Design & Innovation

Predicting Probability of Olympian Winning Medal (GitHub) Oct 2019 – Nov 2019

- Analysed data using Pandas in Jupyter notebooks to study impact of different factors on Olympian success
- Performed Missing Complete At Random test and Imputing to improve dataset quality

ACTIVITIES AND LEADERSHIP

NTU Hall 1 Hall Council – Financial Secretary Sept 2019 – Sept 2020

- Analysed past expenditure to manage approved budget of over $25,000 for Hall 1 operation
- Assumed role as main liaison coordinating with Student Affairs Office for submissions from by 10 committees

NTU Hall 1 Hall Council – Social Secretary Sept 2018 – Aug 2019

- Led 8 team members to organize a *Joint-Hall Halloween Event* in limited time; participated by over 400 residents
- Planned, organised, and executed regular social activities with attendance count of over 200 each event

ADDITIONAL INFORMATION

- **Programming Languages:** Python, JavaScript, Assembly (ARM), HTML, CSS, SQL, C++, C
- **Frameworks & Libraries:** Flask, Pandas, NumPy, PyTorch, TensorFlow, Scikit-learn, Plotly
- **Tools:** Git, Docker, Unix, Azure, GitLab CI/CD
- **Programs:** LabVIEW, MATLAB, Microsoft Office (Excel, Word, PowerPoint, Outlook)
- **Online Courses and Certificates:** CS50 & CS50 AI (Harvard/EdX), Neural Networks & Deep Learning (Coursera)