Melvin Kok Xinwei

(+65) 96616579| mkok002@e.ntu.edu.sg | linkedin.com/in/melvinkokxw | Singapore

EDUCATION

Nanyang Technological University (NTU) <div align="right">Singapore</div>
Bachelor of Engineering (Electrical and Electronic Engineering) <div align="right">**EXPECTED** 05/2022</div>
Honours (Merit) (Expected)
Relevant Coursework: Data Structures & Algorithms; Computer Communications; Microprocessors

PROFESSIONAL EXPERIENCE

Thales Group
Software Engineer Intern <div align="right">01/2021 – Present</div>
Python | Pandas | NumPy | Docker | Kibana
- Automate cleaning and processing of over **200GB** of daily data
- Develop dashboards for previously inaccessible data insights and visualisation

Thales Group
Software Engineer Intern <div align="right">05/2020 – 08/2020</div>
Python | Flask | Pandas | NumPy | JavaScript | Plotly | Docker | GitLab CI/CD | Azure
- Spearheaded project for custom full-stack data analysis web application
- Deployed web application across **5** ground transport projects internationally
- Reduced over **150 man-hours** annually for root cause analysis of technical issues

ACADEMIC PROJECTS

Improving Deep Learning Accuracy Using GANs <div align="right">08/2020 – 11/2020</div>
Python | PyTorch
- Improved classification accuracy of *Convolutional Neural Network* (CNN) using images generated by *Generative Adversarial Networks* (GANs)
- 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 <div align="right">10/2019 – 11/2019</div>
Python | Scikit-learn | Pandas | NumPy | Matplotlib | XGBoost
- Performed Missing Complete At Random (MCAR) test and Imputing to improve dataset quality
- Analysed data to study the impact of different factors on Olympian success

ACTIVITIES AND LEADERSHIP

NTU Hall 1 Hall Council
Financial Secretary <div align="right">09/2019 – 09/2020</div>
- Analysed past expenditure as benchmarking to manage current finances for Hall 1 operation
- Managed approved budget of over **$25,000**
- Assumed role as Main Liaison to coordinate with Student Affairs Office for reimbursement claims upon valid receipts / invoices submitted by **10 committees**

NTU Hall 1 Junior Common Room Committee
Social Secretary <div align="right">09/2018 – 08/2019</div>
- Led **8** team members to organize a *Joint-Hall Halloween Event* within limited time; successfully participated by over **400** residents
- Planned, organised and executed regular social activities with attendance count of over **200** each event
- Managed the Hall Cheerleading Team, and initiated fund raising to support team's training expenses

ADDITIONAL INFORMATION

- **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)