Wang Jihan

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EDUCATION

Nanyang Technological University *Aug 2019 - May 2023(Expected)*

Electrical Electronic Engineering

- CGPA: 4.78 / 5.0
- Scholarship: SM2 Scholarship, MOE Scholar, NTU Science and Engineering Undergraduate Scholarship
- Exchange: National University of Singapore
- Skills: C, Python, Java, SQL, HTML, CSS, JS, React, Pytorch, TensorFlow, Machine Learning, Data Science, Git, Linux

Internship Experience

ByteDance, *Computer Vision Engineer* *May 2021 - Dec 2021*

- Successfully utilized Python Programming to design and built Convolutional Neural Network Model for two Tiktok Models (i.e. Account Report Gif Audit, Account Report Image Audit); utilized Deep Learning Techniques (e.g. Random Resized Crop, Learning Rate Milestones Adjusting, Mixup) for model optimization prior launching.
- Successfully optimized Audit Model Tiktok "ANSA" (i.e. Adult Nudity Sexual Activity) with essential implementations (e.g. Countries Grouping, One-Hot Embedding, Fully Connected Layers, Dropout Layers, Country as Channel).

Panasonic, ***Software Engineer*** *Sep 2020 - Apr 2021*

- Built Python Programs to receive, analyse, sanitize, and visualize Channel State Information under different interference; supported MIMO Wi-Fi-based information communication sensing research.
- Tested human physiology sensors, developed Python Programs to receive, analyse, and visualize human-feature data. Designed analysis systems to extract characteristics information from large-scale data.

Sumitomo – Komastu, *Data & Business Analyst* *May 2020 - Jul 2020*

- Utilized Python Programming to design and develop Machine Learning Model to ease Data Management Team in data analysis and visualization (e.g. Sales Performance, Market Share, Regional Customer Coverage, Competitors).
- Built qualifying criteria to segment customers to support Sales Team; forecasted future sales data and marketing direction.

Research Experience / Academic Projects

A*STAR, *Student-Researcher* *Sep 2020 - Apr 2021*

- Utilized YOLO4 to support building DeepFake *Graphic Detection and Localization Model based on Pytorch*.
- Successfully applied Python Programming to test State-of-the-Art Algorithms for detecting forged images upon comparing accuracy on self-made datasets related to facial and identify management.

Ubisoft, *Student-Researcher* *Dec 2020 - May 2021*

Adversarial Dynamic Reward Shaping for Goal-based Navigation Tasks (Reinforcement Learning)

- Implemented C51 Distributional RL Algorithm with multi-agent setting (i.e. Seeker, Chaser) to control main agents in game (ships) and teach them to sail in entire maze map with multiple local minimums.
- Used Search on Replay Buffer (SoRB) based on Hindset Experience Replay (HER) to form value graphs with midpoints to train accurate distance estimator with valuable rewards provisioning during policy training.

Dyson, *Product Development Challenge 2020* *Aug 2020 - Dec 2021*

- As Group Leader drove 4 team members to design and develop innovative electrical trolley prototype; achieved highest ranking and was selected as one of the Singapore Representatives to attend Global Challenge.
- Responsible for planning objectives and timelines, implementing program activities, and resolving conflicts to foster positive relationships among group members.

Unilever, *Student-Consultant* *Jan 2021 - May 2021*

- Researched market related to Unilever's integrated operations by focusing on supply chain end-to-end operations; successfully developed strategies to better organize integrated operations.

- Researched into customer generation system and customer shipping system, interacted with people from different divisions to gain insights into business processes; provided recommendations pertaining to operation efficiency and productivity.

Accenture, *Student-Consultant* *Jan 2021 - May 2021*

- Identified and implemented changes to User Interface of European Digital Appointment Application; reviewed multiple sources for extraction, interpretation, and data combination to address and rectify current problems.
- Gathered and analysed existing data usage and best-practice applications (e.g. design principles) to determine changes based on feasible implementation with positive impacts; monitored changes performance.