## Wang Boxiang

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### **EDUCATION**

## Nanyang Technological University (NTU)

Aug 2018 – *May 2022* (Expected)

- Bachelor of Engineering (Electrical and Electronic Engineering); Minor Study: Mathematics
- Honours (Highest Distinction) (Expected), current CGPA: 4.90 / 5.00
- Relevant Modules: (1) Introduction to Data Science & Artificial Intelligence (2) Computer Communications
  (3) Data Structure and Algorithms (4) Introduction to Operating Systems (Ongoing)

## Overseas Summer Session Program, University of California, Los Angeles

Jun 2019 - Aug 2019

Gained new perspectives and insights into America economic issues through discussions in class

## **ACADEMIC & MODULE PROJECT / RESEARCH EXPERIENCE**

NTU Final Year Project (FYP)

Aug 2021 - Present

FYP Project: Unsupervised Domain Adaptation for Object Recognition

- Created a machine learning model to do classification and regression Artificial Intelligence tasks in the area of Computer Vision
- Deployed Convoluted Neural Network layers with <u>TensorFlow</u> to reach an accuracy around 98% of classification task

## NTU EEE Design & Innovation Project (DIP)

Aug 2020 - Dec 2020

DIP Project: **Detection of Non-human Faces** 

- Created a deep learning model with deep learning structures to do classification and regression Artificial Intelligence tasks in the area of Computer Vision
- Deployed EfficientNet and ResNet with <u>TensorFlow</u> to reach an accuracy around 98% of classification task

NTU Undergraduate Research Experience on Campus (URECA)

Aug 2019 - May 2020

URECA Project: Design a Virtual Reality Game using Artificial Intelligence

- Developed a system to help patients with bone problem for rehabilitation
- Promoted virtual reality usage by producing interesting game based on Unity and C# Programming

#### **INTERNSHIP**

## National University of Singapore, Intern Researcher

May 2021 – Present

- Design new GPU parallelism structures for deep learning neural networks
- Reach a speedup of 1.45X compared to state of art parallelism structure
- Design a integrated large-scale model training framework with efficient parallelization techniques

## Huawei International Pte Ltd, Intern Researcher on Al Security

Jan 2021 – Aug 2021

- First introduced the third class of Membership Inference Attack with Facial Recognition task and Transfer Learning
- Managed to develop current Membership Inference Attack with higher accuracy
- Implement Membership Inference Attack on language dataset and implement Membership Inference Attack with Graph Neural Network

#### **RESEARCH INTERESTS**

- Machine Learning: Deep Learning, Computer Vision, Natural Language Processing, Recommendation System
- High Performance Computing: Distributed Systems, Parallel Computing

## **AWARDS & ACHIEVEMENTS**

- Dean's List Student Award, NTU (top 5%)
- Science and Technology Undergraduate Scholarship, NTU
- GRE score: 327/340

2019 - 2020, 2020 - 2021

Aug 2017 - Present

# **SKILLS**

- $\label{eq:General:C} \textbf{General:} \ \texttt{C} \ / \ \texttt{C++}, \ \texttt{MATLAB}, \ \texttt{Java}, \ \texttt{HTML}, \ \texttt{JavaScript} \\ \textbf{Tools:} \ \texttt{PyTorch}, \ \texttt{TensorFlow}$