# **Pham Trung Viet**

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#### **EDUCATION**

### Singapore University of Technology and Design (SUTD)

May 2018 to present

- Bachelor of Engineering (Information System Technology and Design)
- GPA 4.2/ 5.0, expected Magna Cum Laude
- SUTD Undergraduate Merit Scholarship
- Expected Date of Graduation: August 2021

#### **WORK EXPERIENCES**

**Assurance Analytics** 

### **Prudential Corporation Asia**

**Singapore** 

May 2020 to Aug 2020

- Worked on the Identity Access Management project to develop an automatic entitlement grouping system for the existing employee database that allows employers to gain insights into their employees' access control and potential risks.
- Created a realtime Power BI report that analyses the previously found information about employees' risk and access privileges through insightful and interactive visualisations.

#### **LionsBot International Pte Ltd**

Singapore

### Intern/ Part-time Software Researcher

May 2019 to Feb 2020

- Constructed a computer vision pipeline for a real-time image segmentation module to improve robot autonomous navigation in a research group of 2 with the guidance of senior developers.
- Customised and trained the neural network using ICNet architecture in Tensorflow that resulted in significant increases in segmentation task accuracy while lowering inference rate. Incorporated the inferencing module into ROS.

9thWonder Vietnam
Web Development Intern Jan 2018

Joined a 5 weeks web development internship that assisted the company in developing front-end web components using HTML, CSS and Javascript based on designs requested by clients.

# Institute for Infocomm Research @ A\*STAR

Singapore

#### **Research Attachment Program**

Dec 2016

- Collaborated with seniors researchers in to designed and programmed a rehabilitation game that would aid physically impaired patients in their recovery process.
- Utilized motion sensors such as eye and muscles tracker to create hand-eye coordinate game exercises in Unity 3D Platform.
- Project was shortlisted and presented at Singapore Science and Engineering Fair (SSEF) 2017.

#### **ACADEMIC PROJECTS**

# Undergraduate Research Opportunity Program (SUTD) Deep learning to predict vertebrae stress and strength from CT Scan

Singapore

Sep 2020 to Present

- Working on an individual project that implements state of the art computer vision architecture
   (SpatialConfiguration-Net and U-Net) for semantic segmentation of 3-dimensional CT scan of the vertebrae region.
- Developing a full pipeline to predict the stress and strength of the spine region which could potentially boost the time taken to assess patients' spine for potential injury.

# Computational Data Science (SUTD) Jazz music generation using Deep Learning

Singapore Sep 2020 to Dec 2020

- Developed a full pipeline: from preprocessing midi data to training and generating music.
- Built and assessed multiple neural network models for Jazz music generation, utilising state-of-the-art natural languages processing architecture such as LSTM and Transformer. Explored different music embedding approaches that best suited for Jazz music.

# Introduction to Information Systems & Programming (SUTD) Android App for events and networking

Singapore Sep 2019 to Dec 2019

- Worked in a group of 6 members to develop an Android App that aids event's registration and attendance process while allowing users networking through selfies with the help of facial recognition.
- In charge of backend face-recognition engine and HTTP requests between the client and server for login, registration and networking processes.
- Achieved third place for the Mitsubishi Corporation award.

# **CO-CURRICULAR ACTIVITIES and VOLUNTEER EXPERIENCES**

## **University Teaching Assistant**

Sep 2020 to Dec 2020

• Selected to be one of 5 TA's for Introduction to Algorithms course. Helped the professors in marking homework, consultation hours and answer questions on the course forum.

SUTD Boxing Club 2018 to 2019

## Vice president

 Planned and conduct weekly practices for the club. Organized university inter martial art sparring event for SUTD students together with the university's other martial art committee.

#### **MINDS Towner Gardens School**

Jan to May 2017

• Taught and organized a half-day event for a class of 20 children with special needs. Guide them through essential daily activities and concepts and play games and sports with them.

#### ADDITIONAL INFORMATION

- Proficient in Python, Java, HTML5/CSS3 Android and Linux OS.
- Keras and Tensorflow.
- Visualisation program includes Adobe Photoshop and Microsoft Power BI
- Fluent in English and Vietnamese.

<sup>\*</sup> Please visit victorpham1997.github.io/#acad\_proj to see more of my projects.