Pham Trung Viet

Mobile : +65 90948597

Email: victorpham1997@gmail.com

LinkedIn : www.linkedin.com/in/trung-viet-pham

Website: https://victorpham1997.github.io

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

Singapore University of Technology and Design (SUTD)   **Singapore**
University Teaching Assistant   **September 2020 to Present**
- Selected to be one of 5 UTA's for 50.004 Introduction to Algorithms course. Helped the professors in marking homeworks, consultation hours and answer questions on the course forum.

Prudential Corporation Asia   **Singapore**
Assurance Analytics   **May 2020 to August 2020**
- Worked on the Identity Access Management project where I developed the automatic grouping of existing entitlements to create potential Roles and analyse their significance for the existing Identity Access Management hierarchy using Python and Pandas library.
- Developed a Risk Scoring and Assigning system for Identities within the company based on their access level to different applications using Python, Pandas. Designed a report page for consisting visualisations and analysis for identities' risk score using Power BI.

LionsBot International Pte Ltd   **Singapore**
Part-time Software Researcher   **September 2019 to December 2019**
- 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 developer using Tensorflow and ICNet model.
- Trained the model using data collected by the company.
Software Engineer Intern   **May 2019 to August 2019**
- Developed a GUI that allows the user to have easy and intuitive access to the control of different components of the robots. The package was programmed for ROS using Python and UI design platform Qt Design.
- Redesigned the mapping robot with the integration of 360-degree LiDAR with improved scanning frequency to enhance the mapping function of the robot.
- Developed a ROS driver and visualisation for the 4 planes LiDAR for potential future utility.

9thWonder   **Vietnam**
Web Development Intern   **January 2018**
- Developed and ensured the interactiveness and responsiveness of the front end components for websites based on templates and requirements given by clients.
- Coded using HTML, CSS and JavaScript.

Institute for Infocomm Research @ A*STAR   **Singapore**
Work attachment   **December 2016**
- Designed and programmed rehabilitation game for physically impaired patients, along with seniors researchers.
- Utilized advanced motion and behaviour sensors such as eye tracker Tobii Eyex, Myo armband and Leap motion in order to create hand-eye coordinate exercises in Unity 3D environment.
- Shortlisted and presented the product at Singapore Science and Engineering Fair (SSEF) 2017.

ACADEMIC PROJECTS

Undergraduate Research Opportunity Program (SUTD)   **Singapore**
Full pipeline for predicting vertebrae stress and strength from CT Scan   **September 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 from patient's features and the 3-dimensional model extracted.

Computational Data Science (SUTD)   **Singapore**
Jazz music generation using recurrent neural network   **September 2020 to November 2020**
- Developed a full pipeline from preprocessing Jazz midi data to training and generating music.
- Built a neural network architecture for Jazz music generation by utilising popular natural language processing neural networks such as LSTM and Attention. Explored different music embedding approaches that best suited for Jazz music embedding.

Introduction to Information Systems & Programming (SUTD)   **Singapore**
Android App for events and networking   **September 2019 to December 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.
- Handled backend face-recognition engine using dlib facial recognition library. Incharge of HTTP requests between the client and server for login, registration and networking processes.
- Achieved third place for the Mitsubishi Corporation award.

* Please visit https://victorpham1997.github.io/#acad_proj to see more projects I have done.

EXTERNAL COMPETITION

ROBOCON International Design Contest   **Japan**
Robotic Competition   **August 2018**
- Represented Singapore University of Technology and Design to participate in the international competition which required to build robots to compete against one another.
- Built the robots using basic Arduino and various components.

Singapore Science and Engineering Fair   **Singapore**
Competition   **March 2017**
- Developed a rehabilitation game for physically impaired patient using Unity 3D and C# in a team of 2.
- The project was short-listed against almost 300 projects into the final presentation round.

CO-CURRICULAR ACTIVITIES and VOLUNTEER EXPERIENCES

SUTD Boxing Club   **2018 to 2019**
Vice president
- Organized university inter martial art sparring event for SUTD students together with the university's other martial art committee.
- Planned and led the weekly practices for the club consisting of 10 members to improve their strength and endurance and boxing skills.

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, Tensorflow machine learning library.
- Visualisation program includes Adobe Photoshop and Microsoft Power BI
- Fluent in English and Vietnamese.