TZU-YUN SHANN

Aspiring AI Engineer - UBC Alumnus

CONTACT

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SKILLS

Deep Learning 6+ yrs

Machine Learning 6+ yrs

Reinforcement Learning 6+ yrs

Computer Vision 6+ yrs

Python 6+ yrs

PyTorch 5+ yrs

Tensorflow 2+ yrs

C/C++ 4+ yrs

Java 2+ yrs

Matlab 2+ yrs

Git 4+ yrs

EDUCATION

MSc in Computer Science — 2018 - 2022
University of British Columbia, Vancouver BC, Canada

My research interest lies in the intersection of reinforcement learning and computer vision. I'm particularly interested in how we can train an robust autonomous agent that reasons about and understands its surroundings. My MSc thesis, "Reinforcement Learning in the Presence of Sensing Costs," was done under the guidance of Dr. Leonid Sigal and Dr. Michiel van de Panne.

BSc in Computer Science — 2014 - 2017
National Tsing Hua University, Hsinchu, Taiwan

Passed with **3.96 GPA**.

WORK EXPERIENCE

Projects & Data Associate — Feb '24 - Present
Phazemos, Aldie VA, USA (Remote)

My responsibilities broadly include, but are not limited to, data discovery, optimization, as well as utilizing AI to improve and automate day-to-day processes. I also build internal tools for our business. Our tech stack includes Python, Excel, Tableau and Salesforce.

AI Engineer — Oct '22 - Feb '23
Onoma AI, Seoul, South Korea (Remote)

I developed **computer vision** based solutions for our **AI webtoon service**, which converts natural language input into rough comic sketches to accelerate the creative process. Our tech stack includes Python, PyTorch, Git, object detection, generative model & diffusion model.

Research Intern — May '20 - Nov '20
Borealis AI, Toronto ON, Canada (Remote)

As a full-time intern, I worked on improving exploration strategies for **reinforcement learning** under the guidance of Dr. Ruitong Huang and Dr. Pablo Hernandez Leal. Our tech stack included Python, PyTorch, Git, reinforcement learning and meta-learning.

Research Assistant — Jan '17 - Aug '18
National Tsing Hua University, Hsinchu, Taiwan

As a full-time research assistant, I developed novel deep learning methods for **reinforcement learning** and **robotic control** under the guidance of Prof. Chun-Yi Lee. Some of my work led to publications at internationally renowned conferences (please find the full list below). Our tech stack included Python, Tensorflow, PyTorch, computer vision, reinforcement learning and robotic.

Software Engineer Intern — Jul '16 - Sep '16
MediaTek, Hsinchu, Taiwan

I created an internal tool for testing and profiling our camera sensors. Our tech stack included C/C++.

ACHIEVEMENTS

International Tuition Awards

University of British Columbia

Awarded from 2018-2022.

IELTS

8.0 out of 9 Band

PUBLICATIONS

Adversarial Exploration Strategy for Self-Supervised Imitation Learning **CoRL 2019**

In Proceedings of the Conference of Robot Learning (CoRL), Oct. 2019 (Oral presentation)

Zhang-Wei Hong, Tsu-Jui Fu, **Tzu-Yun Shann**, Yi-Hsiang Chang, Chun-Yi Lee

Diversity-Driven Exploration Strategy for Deep Reinforcement Learning **NeurIPS 2018**

In Advances in Neural Information Processing Systems (NeurIPS), Dec. 2018

Zhang-Wei Hong, **Tzu-Yun Shann**, Shih-Yang Su, Yi-Hsiang Chang, Tsu-Jui Fu, Chun-Yi Lee.

A Deep Policy Inference Q-Network for Multi-Agent Systems **AAMAS 2018**

In Proceedings of the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), Jul. 2018

Tzu-Yun Shann$*$, Shih-Yang Su$*$, Zhang-Wei Hong$*$, Yi-Hsiang Chang, Chun-Yi Lee ($*$ indicates equal contribution)

Virtual-to-Real: Learning to Control in Visual Semantic Segmentation **IJCAI 2018**

In Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI), Jul. 2018

Zhang-Wei Hong, Yu-Min Chen, Shih-Yang Su, **Tzu-Yun Shann**, Yi-Hsiang Chang, Hsuan-Kung Yang, Brian Hsi-Lin Ho, Chih-Chieh Tu, Yueh-Chuan Chang, Tsu-Ching Hsiao, Hsin-Wei Hsiao, Sih-Pin Lai, Chun-Yi Lee