Tzu-Yun Ariel Shann

Software & Al Engineer

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S LANGUAGES

- Mandarin Native
- English IELTS 8.0
- German A2-B1
- Spanish A1
- Korean A1
- Japanese A1

★ REFERENCES

Vivienne Chen, VP Operations, Phazemos viviennelchen@gmail.com

Douglas Henry, *CEO*, Phazemos bdouglashenry@gmail.com

PROFILE

As a software developer and ML/AI researcher, I excel at rapidly integrating tools to solve complex challenges. I thrive in dynamic, distributed teams where adaptability and innovation drive impact, with a proven track record across both startups and academic research labs. Passionate about bridging cutting-edge ML/AI technologies with practical applications, I bring a unique balance of technical rigor, research-driven thinking, and clear communication —backed by a commitment to continuous learning and growth.

SKILLS

Python | Machine Learning | Reinforcement Learning | Computer Vision | PyTorch | Tensorflow | NumPy | Pandas | scikit-learn | Matplotlib | Git | Shell Scripts | C/C++ | Java | Matlab | SQL | Apex

EDUCATION

University of British Columbia, MSc in Computer Science 2018 – 2022 | Vancouver BC, Canada

- Co-supervised by Prof. Leonid Sigal and Prof. Michiel van de Panne, and graduated with a 92.2% GPA
- My research primarily focused on <u>reinforcement learning</u>. Please refer to my MSc Thesis: *'Reinforcement Learning in the Presence of Sensing Costs' for more detail*

National Tsing Hua University, BSc in Computer Science

2014 – 2017 | Hsinchu, Taiwan

- Worked as a part-time research assistant to Prof. Chun-Yi Lee, on <u>reinforcement learning</u> and <u>robotics</u>
- My undergraduate thesis focused on human-computer interaction (HCI), supervised by Prof. Hao-Chuan Wang
- GPA: 3.96/4.30

PROFESSIONAL EXPERIENCE

Software Engineer, Phazemos 🛛

Feb 2024 - present | Remote

- Develop Apex code to create complex business processes and custom logic within Salesforce
- Create Python-based tools and automations to streamline workflows and enhance operational efficiency
- Lead initiatives to pre-process, clean, and visualize data
- Integrate multiple data sources, and lead the development of client-facing dashboards, which successfully increases client's visibility into our services
- Proficient in technologies including Python, data visualization tools, and Salesforce

Al Engineer, Onoma Al 🛽

Oct 2022 - Feb 2023 | Remote

- Developed <u>computer vision</u> components for AI webtoon (comics) generation
- Utilized techniques such as diffusion models, generative models, and object detection

Research Intern, RBC Borealis 🛛

May 2020 - Nov 2020 | Toronto ON, Canada (Remote)

- Conducted literature survey in the area of reinforcement learning and its applications in fintech
- Improved exploration strategies for reinforcement learning algorithms in terms of sample efficiency, under the guidance of Dr. Ruitong Huang and Dr. Pablo Hernandez Leal

Full-Time Research Assistant,

ELSA Lab, National Tsing Hua University 🛛

Jan 2017 – Aug 2018 | Hsinchu City, Taiwan

- Developed novel deep learning methods for <u>reinforcement</u> <u>learning</u> and <u>robotic control</u> as a full-time research assistant under the supervision of Prof. Chun-Yi Lee
- Contributed to publications presented at internationally renowned conferences

Software Engineer Intern, MediaTek 🛛

Jul 2016 – Sep 2016 | Hsinchu City, Taiwan

• Designed and developed an internal tool for testing and profiling camera sensors using C/C++

PUBLICATIONS

Reinforcement Learning in the Presence of Sensing Costs, UBC MSc Thesis ☑ 2022

Adversarial Exploration Strategy for Self-Supervised Imitation Learning,

Conference of Robot Learning (CoRL) (Oral presentation) 2019

Diversity-Driven Exploration Strategy for Deep Reinforcement Learning, Neural Information Processing Systems (NeurIPS) 2 2018

A Deep Policy Inference Q-Network for Multi-Agent Systems, International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2018

Virtual-to-Real: Learning to Control in Visual Semantic Segmentation,

International Joint Conference on Artificial Intelligence (IJCAI) 2018