

TZU-YUN (ARIEL) SHANN

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🌐 [lasirenashann.github.io](https://github.com/lasirenashann)

📍 Cedar 05-204, Ponderosa Commons, 2075 West Mall, V6T 1Z2, Vancouver BC, Canada

Education

University of British Columbia, Vancouver BC, Canada Sep 2018 - Present

M.Sc. in Computer Science

Advisor: Leonid Sigal

- Reinforcement learning and computer vision
- GPA: 90% (up to January 2019)

National Tsing Hua University, Hsinchu, Taiwan Sep 2014 - Jun 2017

B.S. in Computer Science

- GPA: 3.96/4.30 (overall), 4.17/4.30 (Last 60)

National Chung Hsing University, Taichung, Taiwan Sep 2013 - Jun 2014

Computer Science and Engineering

- GPA: 3.82/4.00 (Ranked 1st out of 34 students)
- Transferred to National Tsing Hua University in September 2014

Publication

Diversity-Driven Exploration Strategy for Deep Reinforcement Learning [\[pdf\]](#)

Z.-W. Hong, **T.-Y. Shann**, S.-Y. Su, Y.-H. Chang, T.-J. Fu, C.-Y. Lee. In Advances in Neural Information Processing Systems (**NeurIPS**), 2018.

(A shorter version of this paper has been accepted in ICLR 2018 Workshop [\[pdf\]](#))

A Deep Policy Inference Q-Network for Multi-Agent Systems [\[pdf\]](#) [\[code\]](#)

T.-Y. Shann^{*}, S.-Y. Su^{*}, Z.-W. Hong^{*}, Y.-H. Chang, C.-Y. Lee. In Proceedings of the International Conference on Autonomous Agents and Multi-Agent Systems (**AAMAS**), 2018.

(* indicates equal contributions)

Virtual-to-Real: Learning to Control in Visual Semantic Segmentation [\[pdf\]](#) [\[video\]](#)

Z.-W. Hong, Y.-M. Chen, H.-K. Yang, S.-Y. Su, **T.-Y. Shann**, Y.-H. Chang, B. H.-L. Ho, C.-C. Tu, T.-C. Hsiao, H.-W. Hsiao, S.-P. Lai, Y.-C. Chang, C.-Y. Lee. In Proceedings of the International Joint Conference on Artificial Intelligence (**IJCAI**), 2018.

Experience

Graduate Teaching Assistant Sep 2018 - Present

University of British Columbia, Vancouver BC, Canada

- TA for CPSC 425 Computer Vision (Leonid Sigal).

Research Assistant

Jan 2017 - Aug 2018

ELSA Lab, National Tsing Hua University, Hsinchu, Taiwan

Advisor: Chun-Yi Lee

- Proposed an algorithm for multi-agent reinforcement learning.
- Proposed methods to improve exploration in reinforcement learning.
- Worked on virtual-to-real transfer of vision-based robotic control.
- Worked on self-supervised imitation learning.

Undergrad Research Project

Jul 2016 - Dec 2016

CSC Lab, National Tsing Hua University, Hsinchu, Taiwan

Advisor: Hao-Chuan Wang

- Focused on human-computer interaction.
- Prototyped a VR chatroom to explore the effect of eye contacts in online group communication.

Software Engineer Intern

Jul 2016 - Sep 2016

Multimedia Department, MediaTek HQ, Hsinchu, Taiwan

- Developed product testing and verification tools using C#/C++.
- Carried out performance analysis.

Summer Program Student

Aug 2015 - Sep 2015

Technical University of Munich, Munich, Germany

- Built a small navigation robot with Arduino.
- Explored the interplay between geodesy and engineering.
- Took German courses (level: A2).

Awards & Honours

Student Volunteer, *32nd Conference on Neural Information Processing Systems, 2018***International Tuition Award**, *University of British Columbia, 2018***Academic Achievement Award**, *National Tsing Hua University, 2017**Awarded to top 5% students in Department of Computer Science***Academic Achievement Award**, *National Chung Hsing University, 2014**Awarded to top 5% students in Department of Computer Science and Engineering*

Skills

Programming languages

Python, C/C++, Matlab, Java

Deep learning frameworks

Tensorflow, PyTorch, Keras

Tools

Git, Vim, Latex

Languages

Chinese, English (IELTS 8.0), German (A2-B1), Spanish (A1-A2)