

Anson Wong

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Education

The University Of Southern California

M.S. IN COMPUTER SCIENCE

- Major CGPA: N/A

LA, U.S.A

Aug. 2018 - Present

The University Of Hong Kong

B.S. IN COMPUTER SCIENCE

- Major CGPA: 3.5

Hong Kong

Sep. 2013 - Jun. 2018

The University of North Carolina at Chapel Hill

ONE-YEAR EXCHANGE STUDENT

- Major CGPA: 3.95

NC, U.S.A

Aug. 2016 - May. 2017

Experience

Fundroots Creative Software Ltd.

SOFTWARE ENGINEER (MOBILE APPLICATION, TRADING PLATFORM)

- Worked on backend of a trading system and an Android mobile application for frontend.

Hong Kong

Aug. 2015 - Aug. 2018

Undergraduate Research at The University Of North Carolina at Chapel Hill (Prof. Dinesh Manocha)

UNDERGRADUATE RESEARCH ASSISTANT, WORKING ON CROWD SIMULATION AND ROBOT NAVIGATION

- Mixed real-world unannotated videos with synthetic agents in a novel way using simulation tool and unreal engine 4. Modified simulation environment, automated agent models and poses generation procedures.
- Resulted in an academic paper.
- Implemented various obstacle avoidance policies on real robot and carried out experiments for comparison. Perform coordinate mapping on existing first-person view video datasets which can serve as training dataset for obstacle avoidance (e.g. expert demonstration in inverse reinforcement learning).

Sep. 2016 - May. 2017

NC, U.S.A

Undergraduate Research at The University Of Hong Kong (Dr. Kenneth Wong)

RESEARCH ON DEEP LEARNING

- Wrote codes on visualizing learning performance of deep learning models and dynamic generation of deep learning models with high-level parameters.

Hong Kong

Mar. 2016 - May. 2016

Undergraduate Research at The University Of North Carolina at Chapel Hill (Prof. Dinesh Manocha)

RESEARCH FOR GENERATION OF SYNTHETIC CROWD DATASET FOR MACHINE LEARNING

- Generated fully synthetic crowd dataset for crowd understanding using simulation tool and unreal engine 4.
- Resulted in an academic paper.

June. 2015 - Sep. 2015

NC, U.S.A

DARPA Robotic Challenge

STUDENT MEMBER FOR HKU TEAM

- Involved in robot operation. One of the field team member.

LA, U.S.A

Jun. 2015

HKU Advanced Robotic Laboratory

STUDENT MEMBER

- Worked on robot arm manipulation. Created a demo in which a humanoid robot performed drawing on a board.

Hong Kong

Jan. 2015 - Jun. 2015

Apptask LTD.

MOBILE APPLICATION DEVELOPER

- Reviewed codes and implemented additional features for a mobile application which connects to electronic sofas. Stabilized remote connection via bluetooth.

Hong Kong

Jan. 2015 - Jun. 2015

Extracurricular Activity

AIESEC-LC-HKU (Global Youth-run organization)

Hong Kong

INFORMATION MANAGEMENT TEAM MEMBER

Sep. 2014 - Jun. 2015

- Responsible for information management of the organization. Develop a mobile application for event management and registration.

Honors & Awards

2016 **Rosita King Ho Scholarship**, (Support oversea exchange)

Hong Kong

2015 **The Arthur and Louise May Memorial Fund Scholarship**, (Support oversea research)

Hong Kong

2013 **Sir Edward Youde Memorial Prizes**, (Support academic outstanding students)

Hong Kong

2012 **Silver Award**, Asia International Mathematical Olympiad

Hong Kong

Presentation

11th Annual Undergraduate Research Symposium

NC, U.S.A

PRESENTING "SYNTHETIC DATA FOR CROWD AND HUMAN UNDERSTANDING"

Apr. 2017

- Introduced the use of synthetic data in crowd understanding, talked about the advantages over conventional human labelling and how it improved pedestrian-detection accuracy.

Publications

MixedPeds: Pedestrian Detection in Unannotated Videos using Synthetically Generated Human-agents for Training

Paper

COAUTHOR

2017

- Accepted in AAAI 2018
- URL: <https://arxiv.org/abs/1707.09100>

LCrowdV: Generating Labeled Videos for Simulation-based Crowd Behavior

Paper

COAUTHOR

2016

- Accepted in ECCVW 2016
- URL: <http://gamma.cs.unc.edu/LCrowdV/>

Projects

Training Collision Avoidance Policy in Simulation through Deep Reinforcement Learning

Hong Kong

HKU CS FINAL YEAR PROJECT

May. 2017

- Using Unreal Engine 4 to train a collision avoidance policy, which is applicable on a real robot, using state-of-the-art deep reinforcement learning algorithm and several machine learning frameworks.
- url: <https://ahtsan.github.io/rlbot/index.html>

Personal

Github

[HTTPS://GITHUB.COM/AHTSAN](https://github.com/ahtsan)

Personal website

[HTTPS://AHTSAN.GITHUB.IO/](https://ahtsan.github.io/)