

Education

The University Of Southern California

LA, U.S.A

M.S. IN COMPUTER SCIENCE

Aug. 2018 - Present

· Major CGPA: N/A

The University Of Hong Kong

Hong Kong

B.S. IN COMPUTER SCIENCE

Sep. 2013 - Jun. 2018

· Major CGPA: 3.5

The University of North Carolina at Chapel Hill

NC, U.S.A

ONE-YEAR EXCHANGE STUDENT

Aug. 2016 - May. 2017

• Major CGPA: 3.95

Experience

Fundroots Creative Software Ltd.

Hong Kong

SOFTWARE ENGINEER (MOBILE APPLICATION, TRADING PLATFORM & PRICE FEED ANALYSIS)

Aug. 2015 - PRESENT

- Worked on backend of a trading system and an Android mobile application for frontend.
- · Analyzed historical price feed from different source and developed automated trading algorithm.

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

NC, U.S.A

Undergraduate Research Assistant, working on crowd simulation and robot navigation

Sep. 2016 - May. 2017

- Mixed real-world unnanotated 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).

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

Hong Kong

RESEARCH ON DEEP LEARNING

Mar. 2016 - May. 2016

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

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

NC, U.S.A

RESEARCH FOR GENERATION OF SYNTHETIC CROWD DATASET FOR MACHINE LEARNING

June. 2015 - Sep. 2015

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

DARPA Robotic Challenge

LA, U S.A

STUDENT MEMBER FOR HKU TEAM

Jun. 2015

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

HKU Advanced Robotic Laboratory

Hong Kong

STUDENT MEMBER

Jan. 2015 - Jun. 2015

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

Apptask LTD.

Hong Kong

MOBILE APPLICATION DEVELOPER

Jan. 2015 - Jun. 2015

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

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 2016

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

Personal _____

Github

HTTPS://GITHUB.COM/AHTSAN

Personal website

HTTPS://AHTSAN.GITHUB.IO/