## **MUZI LIU**

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### **EDUCATION**

## The Chinese University of Hong Kong

Hong Kong, China

Bachelor's Degree Computer Science major (Artificial Intelligence stream)

2015-2020 (Expected)

- GPA (Major): 3.70 / 4.00; Cumulative GPA: 3.53 / 4.00 (WES evaluated 3.7)
- Notable Award: Dean's List (Year GPA 3.50 or above, top 10% in the faculty)
- Relevant courses: Linear Algebra and Vector Calculus for Engineers (A-), Discrete Mathematics for Engineers (A), Introduction to Operating Systems (elite class) (A-), Fundamentals of Artificial Intelligence (A), Introduction to Social Networks (A)

### Claremont McKenna College

California, United States

Visiting Exchange Student

2017 - 2018

• Relevant courses: Introduction to Psychology (A-), Neuropsychology (A-)

#### RESEARCH EXPERIENCE

### **Shadow Removal for Robust Face Recognition** (Final Year Project)

CUHK, Hong Kong

Researcher, Supervised by Professor Chi-Wing FU, Philip

Apr 2019 - Dec 2020

- Generated fake shadows in real human frontal face dataset as training data.
- Utilized the Dilated Residual Network (DRN) framework to suppress shadows as baseline performance.
- Developing a new method of generating high-quality photo-realistic face images with shadows eliminated.

### Reinforcement Learning for Convention Emergence in Lexicon Coordination Game

CUHK, Hong Kong

Research Assistant to Professor Leung Ho-fung

Jan 2018 – July 2019

- Proposed a reinforcement learning approach for convention emergence in a lexicon coordination game.
- Analyzed the simulation results and found relations between local conventions in the network and the hindering of the emergence of a global convention.
- Independently wrote a paper for the whole work, which is in submission at ICAISC 2020.

## Norm Emergence in Merging Networks (Undergraduate Summer Research)

CUHK, Hong Kong

Researcher, Supervised by Professor Leung Ho-fung

Jun 2017 – Sep 2017

- Combined the algorithms of merging networks and the tools of convention emergence, in order to explore the agents' behaviors when two networks with local communities are merging into a whole one.
- Reproduced the algorithm of network integration and the local convention establishment in scale-free networks.
- Participated in regular meetings with a team of 5 to report and analyze project progress.
- Completed a research report and a poster presentation of the work in summer 2017 at the Chinese University of Hong Kong.

# AWARDS AND HONORS

Scholarships for Semester Exchange Programme 2016/17

Wu Yee Sun College, CUHK

Yasumoto International Exchange Scholarship

Office of Academic Links (OAL), CUHK

Admission Scholarships for New Students

The Faculty of Engineering, CUHK

### EXTRA-CURRICULAR EXPERIENCE

### Fun to Move: a mobile App that enhances primary students' physical activity level

CUHK, Hong Kong

Back-end developer

Aug 2019 – Sep 2019

Designed and tuned a Recurrent Neural Network (RNN) with Long Short-Term Memory (LSTM) architecture to predict the wearing position of the sports bracelet.

### Exercise Is Medicine (EIM): fitness tracking Web App for chronic patients

CUHK, Hong Kong

Back-end developer

May 2019 - Aug 2019

- Self-learnt tools used in the project, such as docker, TypeORM, and Azure storage service.
- Developed a part of the back-end APIs using TypeORM and MSSQL database.
- Designed the incentive and achievement system to encourage chronic patients to exercise regularly.

## **Summer Volunteer Teacher in Rural Primary School**

Guangxi, China Volunteer teacher Aug 2016 - Sep 2016

Prepared and taught math courses in a primary school located in Long Sheng for two weeks.

Conducted field research for local tourism development for local government.

## **SKILLS**

## Technical skills:

Programming languages: C, Java, Python, JavaScript, Ruby, Prolog, ML, Perl, COBOL, Fortran

Machine learning and deep learning: scikit-Learn, TensorFlow

Web technologies and database: NodeJS, HTML+CSS, XML, jQuery, MySQL, MsSQL.

Languages: Mandarin Chinese (native), English (TOEFL 102/120: reading 28, listening 27, speaking 23, writing 24) and Japanese (elementary proficiency).