

# Ruochen (Charley) Li

Portfolio: <https://rliai.github.io/>

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## EDUCATION

**Carnegie Mellon University (CMU)**, Pittsburgh, PA

May 2020

- Master of Entertainment Technology (MET), Entertainment Technology Center
- Courses: *Distributed Systems (Ongoing)*, *Introduction to Computer Systems*, *Building Virtual Worlds*

**The Hong Kong University of Science and Technology (HKUST)**, Hong Kong

Aug. 2018

- Bachelor of Engineering in Computer Science (COMP)
- Courses: *Software Engineering*, *Computer Graphics*, *Knowledge Discovery in Databases*, *Introduction to Bayesian Networks*, *Internet Computing*, *Introduction to Cloud Computing*, *Big Data Management*

## PROFESSIONAL SKILLS

- **Programming:** C++, Python, C#, JavaScript, PHP, HTML, JAVA, Go
- **Language:** Chinese (native) & English (fluent)
- **Software (OS):** Unity, Unreal 4, Git, Perforce, Linux

## EXPERIENCE

**Institute of Automation, Chinese Academy of Sciences**, Shenyang, China

Dec. 2017 – Jan. 2018

- Software engineering intern in Cloud Computing team with full-time engineers
- Implemented algorithms according to their paper on Spark using Python

**Hong Kong and Shanghai Banking Corporation**, Hong Kong

June 2016 – Feb. 2017

- Software engineering intern in HSBC Asia Pacific, with 5 senior engineers
- Developed software in C++ to support traders

## ACADEMIC PROJECTS

**Olympia** | ETC and Electronic Arts | Software Engineer | C#

Jan. 2019 – May 2019

- Worked as software engineer with 3 designers, 1 technical artist, and 1 graphic engineer
- Developed a VR sandbox game with Unity, HTC Vive and Leap motion using NVIDIA Flex
- Implemented behavior trees for game AI and utilized NVIDIA Flex to simulate liquid and soft body
- Contributed to project website: <https://www.etc.cmu.edu/projects/olympia/>

**Building Virtual Worlds** | ETC | Software Engineer | C#

Sept. 2018 – Dec. 2018

- Created 5 immersive worlds on different interdisciplinary teams of 5 in two-week cycles
- Utilized Unity as well as VR/AR platforms such as Meta 2, HTC Vive, Oculus
- Developed communication, collaboration and iteration skills

**Final Year Project** | HKUST | Project Lead, Software Engineer | Python, Javascript

June 2017 – May 2018

- Implemented a Recurrent Neural Network predicting future hot topics with Keras as well as a data processing pipeline using Python and created a web system using visualization tools such as D3.js

**Undergraduate Research Program** | HKUST | Software Engineer | Python

June 2017 – Aug. 2017

- Used Python to implement a mood prediction algorithm with body gesture with undergraduate and PhD students