

# Tianyi Hu

Master of Computer Engineering  
University of California, Irvine

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## Education

- **University of California, Irvine(UCI)** Irvine, USA  
*Major: Master of Computer Engineering* 2020 - 2022
  - **Courses Taken:** Computer Architecture, Design&Analysis of Algorithms, Introduction to Artificial Intelligence.
  - **GPA of 2020Fall:** 4.0/4.0
- **University of Edinburgh(UoE)** Edinburgh, UK  
*2+2 Dual Bachelor's Degree: B.Eng(Hons) Electronics and Computer Science* 2018 - 2020
  - **Award:** Bachelor of Engineering with Honours (**First Class**)
- **South China University of Technology(SCUT)** Guangzhou, China  
*Major: Information Engineering* 2016 - 2018
  - **Overall GPA and Ranking:** 3.54/4; 71/234

## Research Experience

- **University of Edinburgh(UoE)** Edinburgh,UK  
*Honour Year Project* Sept. 2019 - April. 2020
  - Topic: Towards Privacy Leakage in Deep Models
  - Focus on privacy leakage and memorization properties of machine learning models
  - Conduct research on Membership Inference Attack
  - Supervisor: Prof. Sotirios Tsaftaris
- **University of California, Irvine(UCI)** Irvine,USA  
*Research Assistant & Hardware Developer - Embedded System Project* July. 2019 - Sept. 2019
  - Topic: **Patient Initiated Controlled Analgesic Remote Dispenser**
  - Work on solution of **Opioid Overdose Crisis** in USA
  - Conduct embedded system design & debug
  - Design **PCB layout** & Assembly SMT components
  - Supervisor: Prof. Sergio Gago
- **South China University of Technology(SCUT)** Guangzhou, China  
*Team Leader & Software Developer - Smart Home IoT Project* Mar. 2018 - Aug. 2018
  - Topic: Magic Mirror Assistant - A Smart Home System with voice recognition, face recognition & remote control
  - Related Technique: Django(Python), OpenCV, MQTT, Linux(Raspberry Pi), WebSocket, HTML, CSS, JavaScript, ESP8266(Lua)
  - Partly Open-source at: <https://github.com/hu-tianyi/Magic-Mirror-Assistant>
  - Supervisor: Lei Li(Technician), QinHui Ping(Director of Laboratory Center)

## Publication & Conference

- **Computer Vision and Pattern Recognition(CVPR)** Long Beach,USA  
*WorkShop - CEFRL 2019<sup>1</sup>* June, 2019
  - Title: **Scan-Flood Fill (SCAFF): an Efficient Automatic Precise Region Filling Algorithm for Complicated Regions**
  - Author: Yixuan He, **Tianyi Hu**, Delu Zeng

<sup>1</sup>3<sup>rd</sup> International Workshop on Compact and Efficient Feature Representation and Learning in Computer Vision 2019

## Scholarship, Awards, Grants & Honours

South China University of Technology Scholarship - Second Prize <sup>1</sup>	2018
CaiJianZhong Scholarship - Third Prize <sup>2</sup>	2017
Undergraduate Electronic Design Contest, Guangdong Province - Second Prize	2018
Mathematics Competition of South China University of Technology - Second Prize	2017
Undergraduate Electronic Design Contest, Guangzhou - First Prize	2018
Merit Student of South China University of Technology	2017
Excellent Student Leader of South China University of Technology	2017

## Technical Skills/Interests

- **Scientific:** Python, MATLAB, L<sup>A</sup>T<sub>E</sub>X, Markdown, Jupyter Notebook, Caffe, agda
- **Web App:** Jeklly, Django, HTML, CSS, JavaScript, PostgreSQL
- **Hardware:** C, C++, microPython, Verilog, Lua, Raspberry Pi, Arduino, ESP8266, ESP32

## Additional Experience

- **Member of Clarinet Choir** Edinburgh, UK  
*Edinburgh University Clarinet Choir* *Sept. 2018 - July. 2019*  
 – Participate in rehearsal training as a B♭ Clarinet player
- **Head of Class (Elected)** Guangzhou, China  
*School of Electronics and Information Engineering, SCUT* *Sept. 2017 - July. 2018*  
 – Assist college counsellor, organize class activities and convey notifications  
 – Conduct class meetings
- **Class Representative in charge of Studies (Elected)** Guangzhou, China  
*School of Electronics and Information Engineering, SCUT* *Sept. 2016 - Sept. 2017*  
 – Assist lecturers, collect & hand out assignments and help classmates with their studies
- **Member of Software Department** Guangzhou, China  
*Radio Fans Association<sup>3</sup>, SCUT* *Sept. 2017 - July. 2018*  
 – Participate in and Share skills about programming in weekly workshop
- **Member of Information Department (Web Team)** Guangzhou, China  
*Radio Fans Association<sup>3</sup>, SCUT* *Sept. 2016 - Sept. 2017*  
 – Learn extracurricular programming knowledge and skills  
 – 2016's Outstanding Member in Radio Fans Association
- **Member of Debate Team** Guangzhou, China  
*School of Electronics and Information Engineering, SCUT* *Sept 2016 - July. 2018*  
 – Participate in academy-level debate competitions
- **President of Model United Nation Association** Guangzhou, China  
*Guangzhou High School* *June 2014 - June. 2015*  
 – Host the 1<sup>st</sup> Model United Nations Conference at Guangzhou High School

<sup>1</sup>Top20% in Comprehensive evaluation of student's performance and Top25% in study

<sup>2</sup>Top10% in Comprehensive evaluation of student's performance and Top15% in study

<sup>3</sup>Radio Fans Association is one of the largest technical associations at South China University of Technology