## **Hu Wang**

SMU 80 Stamford Road. Singapore 178902 huwang@smu.edu.sg (+86)13711689918 Homepage http://wanghu.link/welcome

#### **Education**

July 2017--- Now, Singapore Management University, Singapore Research Engineer, LARC Lab co-founded by Carnegie Mellon University and Singapore Management University

- Research in LARC Lab (Living Analytics Research Centre) with Professor Steven Hoi.
- Research in Deep Learning area.
- In charge of FoodAl research project (http://foodai.org) and medical images processing.

September 2014 --- June 2017, South China University of Technology, Guangzhou, Guangdong, China

**Masters of Software Engineering**, Computer Vision & Visual Programming Emphasis

Ranked 4th (52 students).

Fall 2016, **Pittsburg State University**, Pittsburg, Kansas, USA **Visit student**, Computer Technology Emphasis

- Built a remote-controlled car.
- Built a mp3 player using hcs12 dragon board, programmed with assembly language of hcs12 microcontroller.
- Learned project management knowledge, gained computer security experience.
- All selected classes (7 classes) are As, GPA 4.0.

September 2010 --- June 2014, Hunan Agricultural University, Changsha, Hunan, China

### **Bachelors of Electronic Engineering**

Ranked 2nd (72 students).

# Research & Projects

May 2017 to Now

#### Deep Learning in Food and Medical image processing

- Research on Fine-grained classification and semi-supervised learning.
- In charge of FoodAl research project (http://foodai.org) and raised the original top1 / top5 accuracy of food classification from 70% / 90% to 78% / 94%.
- Medical image processing on chest diseases.

January 2017 to May 2017

#### Image Matting algorithm research

- Came up with ideas of algorithms to solve natural image matting problem efficiently.
- Published a paper in Proceedings of the 2017 IEEE International Conference on Computational Science and Engineering(ICSE'17)

#### December 2015 to May 2016

## Project Manager & Developer of Dr. Luck EST Visual Programming Platform

- Used C++ architecture, excellent transfer between different platforms.
- Implemented the backend of the platform, over 20000 C++ codes have been written by me.
- The software was in mass production and put into market now.

#### November 2015

#### **Developer of Know Video Platform**

- Implemented with JS+PHP in 24 hours, a chrome add-in, fancy media previews will show up whenever users type the keywords in the search engine (multiple search engine supported).
- Came up with a marvelous business model, a considerably great UGC platform by which users can upload their video clips.

#### May 2015

## Team Leader & Developer of female shoes shopping guide-system on mobile

- Designed the system architecture and coding, including the database, framework and web-crawler programming.
- Implemented the system and test the system based on Java.

#### December 2014 to January 2015

### Team Leader & Developer of Students homework checking system

- Conceptualize and designed the system architecture and coding.
- Used C++ (including Qt framework), over 99% checking accuracy.

#### June 2014 to September 2014

#### Masked-Men Detection computer vision research

Created a method to find out masked-men on real time videos.

#### January 2014 to March 2014

#### **Independent Implementation of ACM Online Judge**

- Automatically judged ACMers' submissions, this system can be used in competitions.
- Used C++ (Compile core) and Java (Web, Struts + Hibernate).

#### March 2013 to April 2013

#### Independent Implementation of Digital clock based on FPGA

 Programmed based on VHDL of FPGA (Field-Programmable Gate Array).

#### **Publications**

- Congbo Ma, Xiaowei Yang and Hu Wang. Randomized Online CP Decomposition (Newly accepted in January 2018).
- Hu Wang, Zhongming Yang and Congbo Ma. A Fast Image Matting Method based on Interval-line Sampling. In: Proceedings of the 2017 IEEE International Conference on Computational Science and

Engineering(ICSE'17), Guangzhou, China, July 21-22, 2017.

 Hu Wang, Jun Ren. Design of digital clock based on FPGA (In Chinese). Electronic Design and Engineering. 2014, (04):127-129.

# Patents & Copyrights

- "A Graphical Programming Multithreading Synchronization Method." 1 June 2017. Patent (201710405733.7).
- "A Visual Programming Control and Store System." 30 November 2016. Patent (201611092887.7).
- "Dual Mode Video Masked-men Detection Based on Statistical Characteristics." 20 December 2015. Patent (201510971527.3).
- "Masked-men Detection Based on Color Features." 7 July 2015. Patent (201510451280.2).
- "Intelligent Masked-Men Detection system." 26 September 2014.
   Software copyright (2015SR035707).
- "ACM/ICPC Online Judge." 26 March 2014. Software copyright (2015SR035709).

#### Internship

June 2016 to August 2016

Senior Java-Programmer internship of Ant Financial Services Group affiliate with Alibaba Corporation, Hangzhou, China

- Built web-crawler software, Java programming.
- Became familiarized with Alipay SOFA architecture.

August 2015 to May 2016

#### Programmer internship of Dr. Luck Corporation

# Awards & Honors

<ul> <li>Hack Shanghai Global Hackathon</li> <li>Microsoft campus Hackathon Contest</li> <li>South China University of Technology Samsung Scholarship</li> <li>Ali Baichuan Hachathon Programming Contest</li> <li>Tencent Internet innovation and startup contest</li> <li>Star Cup English Speech Contest</li> <li>SCUT Graduate Student Debate Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>The Eleventh Truth Seeking Cup Programming contest</li> <li>Third Prize</li> <li>National Electronic professionals' skills contest</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>Third Prize</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>First Prize</li> </ul>	<ul> <li>South China University of Technology Excellent Students Awards</li> <li>IBM Master the Mainframe Global Individual Contest Third Prize</li> </ul>	2016 2015
<ul> <li>South China University of Technology Samsung Scholarship</li> <li>Ali Baichuan Hachathon Programming Contest</li> <li>Tencent Internet innovation and startup contest</li> <li>National top 100</li> <li>Star Cup English Speech Contest</li> <li>SCUT Graduate Student Debate Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>The Eleventh Truth Seeking Cup Programming contest</li> <li>The Praise of China Cup calligraphy contest</li> <li>National Electronic professionals' skills contest</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Third Prize</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Third Prize</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>First Prize</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>First Prize</li> <li>Hunan Agricultural University ACM Programming Contest</li> </ul>	<ul> <li>Hack Shanghai Global Hackathon</li> <li>Ranked Third</li> </ul>	
<ul> <li>Tencent Internet innovation and startup contest</li> <li>Star Cup English Speech Contest</li> <li>SCUT Graduate Student Debate Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>The Eleventh Truth Seeking Cup Programming contest</li> <li>The Praise of China Cup calligraphy contest</li> <li>National Electronic professionals' skills contest</li> <li>Hunan Agricultural University English Speech Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>Hunan Agricultural University ACM Programming Contest</li> <li>First Prize</li> <li>Hunan Agricultural University ACM Programming Contest</li> </ul>	·	
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<ul> <li>Hunan Agricultural University ACM Programming Contest First Prize 2013</li> <li>The Eleventh Truth Seeking Cup Programming contest First Prize 2012</li> <li>The Praise of China Cup calligraphy contest Third Prize 2012</li> <li>National Electronic professionals' skills contest Excellence Award 2012</li> <li>Hunan Agricultural University English Speech Contest Third Prize 2012</li> <li>Hunan Agricultural University ACM Programming Contest First Prize 2012</li> </ul>	·	
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Activities	<ul> <li>Microsoft Research Asia</li> </ul>	Campus Hackathon Conference	2015
	<ul> <li>Microsoft Corporation</li> </ul>	Microsoft Summer Camp	2015
	<ul> <li>SCUT Microsoft Technology Club</li> </ul>	Vice-president	2015
	<ul> <li>Guangzhou Import/Export Commodi</li> </ul>	ty Fair Interpreter	2015
	<ul><li>Oral English class</li></ul>	Teaching Assistant	2015
	<ul><li>Algorithm &amp; C++ class</li></ul>	Teaching Assistant	2015
	<ul> <li>Qide International Education</li> </ul>	Interpreter	2013
	<ul> <li>Aoji International Education</li> </ul>	Interpreter	2013
	<ul> <li>ACM Programming Innovation Lab</li> </ul>	Team Leader	2011

#### References

Norman H. Philipp, P.E. CM-BIM Assistant Professor Pittsburg State University 1701 South Broadway KTC W226 Pittsburg, KS 66762 620-235-6555

Ronny Galloway, P.E. Assistant Professor and Coordinator MET Program Pittsburg State University 1701 South Broadway KTC W224a Pittsburg, KS 66762 620-778-2880

Choi, Dr. Jae. Assistant Professor Pittsburg State University 1701 South Broadway KTC W224a Pittsburg, KS 66762 620-235-4561