Hao **Ju**

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Education

Department of Information Studies, McGill University *Montreal, Canada*

MISt in Information Studies, research-based *Sept 2019 - Exp. May 2021*
- GPA: 3.67/4.0
- Supervised by Dr. Karyn Moffatt (http://act.mcgill.ca/karyn/)

School of Electronic Engineering, Univ of Electronic Sci & Tech of China (985,211) *Chengdu, P.R.China*

B.Eng. In Electronic Information *Sept. 2014 - July 2018*
- GPA: 3.86/4.0 (Final year 3.91/4.0), Ranking: 5/42 (Final year 3/42)
- Honorary Graduate of UESTC

Employment

Research Assistant *Montreal, Canada*

Department of Information Studies, McGill University *Sept. 2019 - Present*
- Designing and developing a wearable limb-based input system for older adults, based on Raspberry Pi and Java. A study on the difference between interaction habits and performances among older adults and their younger peers is to be performed.

Research Assistant *Hong Kong, P.R.China*

School of Creative Media, City University of Hong Kong *Sept. 2018 - May 2019*
- Provided technical support in Arduino programming and circuit design & troubleshooting for other PhD students.
- Designed and developed hardware and firmware prototypes for visually challenged schoolchildren based on Arduino and C, e.g. musical building blocks introducing programming languages, thermal display systems for geographical education, etc.
- Co-designed and co-conducted user study experiments.

Research Intern *Montreal, Canada*

Shared Reality Lab, McGill University *July 2017 - Oct. 2017*
- Developed the hardware and firmware of a foot-based interactive system based on Arduino and C. Co-designed the menu layout in Unity using C#. Co-designed and conducted qualitative & quantitative usability study through interviews & NASA-TLX questionnaires. Published at ACM DIS'18 conference.
- Enhanced the performance of an existing prototype generating burning-hot illusion with Electro-Muscular Stimulation. Improved temperature detection accuracy by 37.5% by re-designing the system, switching from thermal variable resistors to digital sensors.

Production Management Intern *Shenzhen, P.R.China*

Siglent Technologies *Aug. 2016*
- Co-managed the production and quality control process on the assembly line with full-time employees at the leading Chinese oscilloscope manufacturer.

Core Member, Technical Volunteer *Chengdu, P.R.China*

Technology Association for School of Electronic Engineering *Oct. 2014 - Dec. 2015*
- Provided technical support and hosted weekly workshops on circuit design and embedded system programming in C and VHDL for undergrad students.

Publications

Pressure or Movement? Usability of Multi-Functional Foot-Based Interfaces *Sept. 2017*
- Taeyong Kim, Hao Ju, and Jeremy Cooperstock. 2018. In proceedings of ACM SIGCHI Conference on Designing Interactive Systems (DIS) 2018. ACM. 1219-1227.

A Data-Driven XGBoost-Based Filter for Target Tracking *July 2018*
- Bowen Zhai, Wei Yi, Ming Li, Hao Ju, and Lingjiang Kong. Poster presentation in IET Radar Conference 2018.

Honors and Awards

Ethelwyn Crossley Memorial Scholarship, CAD 4,620 *May 2019*

Mitacs Globalink Graduate Fellowship, CAD 15,000 *Mar 2019*

National Internet Security Scholarship, CNY 30,000 (CAD 5,680) *Aug. 2017*

'Internet Plus' Innovation & Entrepreneurship Competition, Provincial Second Prize *July 2017*

National College Student 'Smarter Connected' System Innovation Competition, Second Prize of SW China *July 2016*

2016 COMAP Interdisciplinary Contest In Modeling, Honorable Mention *Apr. 2016*

Relevant Skills

Programming	MATLAB, C, Python, VHDL, JavaScript, C#, HTML, Java
Tools	Altium Designer, Quartus, Simulink, SPSS, Unity 3D, AutoCAD, Adobe Illustrator, Figma
Embedded Systems	Arduino, STM32, MCS 8051, Xlinx Virtex
Courses	Data Structure & Algorithms, Data Mining, Information Systems Design, User-Centered Design
Languages	Mandarin (native), English (fluent, IELTS 8.0), French (basic)