

# Muhe Yang

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McGill University School of Information Studies | 3661 Peel, Montreal, QC, Canada H3A1X1

## EDUCATION

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**Ph.D. Candidate in Information Studies** Sep. 2019 – Present

**McGill University**, Montreal, Canada

School of Information Studies

- Research interests: Human-Computer Interaction, Accessibility, Older adults, Design
- Research topic: Supporting physical activity in later life | Supervisor: Dr. Karyn Moffatt

**M.F.A. in Information Design and Visualization** Sep. 2015 – May 2017

**Northeastern University**, Boston, U.S.

College of Arts, Media and Design

- Master's thesis: *Visiting, Picturing and Experiencing the Chinese Garden* | Advisor: Dr. Kristian Kloeckl
- Thesis design project: *Visualizing Seasonal Change in the Chinese Garden* | Advisor: Paul Kahn

**B.Eng. in Industrial Design** Sep. 2010 – July 2014

**Taiyuan University of Technology**, China

College of Mechanical Engineering

- Graduation design project: *Blossom—Stainless Kitchen Utensils Serial Design* | Advisor: Dr. Jing Zhao

## AWARDS

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### Scholarships and Fellowships:

**Doctoral Research Scholarship** (CA\$8,334) 2024–2025

Fonds de recherche du Québec – Nature et Technologies (FRQNT)

**Wolfe Chair Graduate Fellowship** (CA\$10,000) 2024–2025

Faculty of Arts, McGill University

**Ph.D. Scholarship and Research Assistantship** (CA\$104,000) 2019–2024

School of Information Studies, McGill University

**McGill Graduate Excellence Fellowship** (CA\$17,000) 2019–2023

**CAMD Graduate Student Scholarship** (US\$21,320) 2015–2017

College of Arts, Media and Design, Northeastern University

### Travels and Impacts:

**ACM SIGACCESS ASSETS'22 Doctoral Consortium Travel Grants** (US\$2,000) 2022

**Best Poster Award**, 14<sup>th</sup> EBSI-SIS Symposium in Information Studies (CA\$50) 2022

**Volunteer of the Month**, the Yellow Door

August 2022

**Comprehensive Examination Completion Award** (CA\$500)

2021

School of Information Studies, McGill University

**The Second Prize** in National University Student Social Practice and Science Contest on Energy Saving & Emission Reduction

2012

Taiyuan University of Technology

## EXPERIENCE

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**ACT Lab, McGill University**

Sep. 2019 – Present

*Research Assistant & Principal Investigator, Doctoral Research in Human-Computer Interaction*

- Doctoral research on designing behaviour change technology for older adults living alone to support their physical activity needs
- Conducted literature review on health persuasive technology, analyzed and synthesized methodologies in empirical studies, and wrote a full paper
- Proposed a study design (approved by my doctoral research committee)
- Conducting a user-centred design research involving understanding user needs by interviews and diaries (completed), exploring solutions by co-design workshops (completed), and testing designed prototypes by interviews and questionnaires (ongoing).

**Defining Our Cyberspace NSERC Project**

Jan. – Sep. 2022

*Research Assistant* supervised by Dr. Rebekah Willson and Dr. Benjamin Fung (McGill School of Information Studies)

- Conducted literature review on the information needs of cybersecurity reverse engineers
- Identified research gaps and potential directions; proposed study designs

**Master's thesis & follow-up independent research project: Information visualization of seasonal color change in the environment**

Jan. 2017 – Jan. 2020

*Principal Researcher*

- Master's thesis project: designing visualizations showing how visitors experience seasonal colour change in a Chinese garden
- Conducted a follow-up research based on the thesis as a self-initiated independent project
- Reviewed relevant literature, collected and analyzed data, proposed a new approach of visualizing seasonal colour change, and wrote a full paper
- Paper published in a peer-reviewed journal

**Taiyuan Jiaofei Geology Information Technology Co., China**

Sep. 2017 – Dec. 2018

*Design & Research Assistant*

- Designed, built demos, and assisted developing seism monitoring devices
- Assisted patent application process

**China Industrial Design Institute**, Shanghai, China

May–July 2016

*Design Intern*

- Assisted organizing *The 1<sup>st</sup> Shanghai Open Data Week* (June 3–8, 2016).
- Assisted organizing *Shanghai Open Data Applications (SODA)* competition
- Designed printed and digital materials to advertise relevant events
- Responsible for running the official SODA account on social media Weibo

**National Contest on Energy Saving & Emission Reduction**, China

Feb.–May 2012

*Undergraduate Researcher*

- Conducted a collective research project on reducing energy waste in university campus canteen system
- Conducted a survey, designed questionnaires, and collected and analyzed data

## PUBLICATIONS

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Conference Full Paper (Peer-reviewed)

**Yang, M** and Moffatt, K. (2024). Navigating the Maze of Routine Disruption: Exploring How Older Adults Living Alone Navigate Barriers to Establishing and Maintaining Physical Activity Habits. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '24)*. 15 pages. <https://doi.org/10.1145/3613904.3642842>. [26.3%]

Conference Short Paper

**Yang, M.** (2022). Supporting Physical Activity in Later Life: Perspectives from Older Adults. *Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22)*. Article 94, 6 pages. <https://doi.org/10.1145/3517428.3550411>

Article in Journal (Peer-reviewed)

**Yang, M.** (2020). Investigating seasonal color change in the environment by color analysis and information visualization. *Color Research & Application*, 45(3), 503-511. <https://doi.org/10.1002/col.22484>

Patent of Invention

Yang D., Li Z., Wang H., **Yang M.** (2018). Device and method for quickly identifying transverse waves on seismic monitoring records. CN201810365058. [submitted on April 23, 2018; under substantive examination and review since November 14, 2018]

Master's Thesis

**Yang, M.** (2017). *Visiting, picturing and experiencing the Chinese garden* (Order No. 10271502). Available from ProQuest Dissertations & Theses Global. (1964252431).

## PRESENTATIONS

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### Research Presentations

**Yang, M** and Moffatt, K. (2024). Navigating the Maze of Routine Disruption: Exploring How Older Adults Living Alone Navigate Barriers to Establishing and Maintaining Physical Activity Habits. In *the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '24)*, May 11–16, 2024, Honolulu, HI, USA.

**Yang, M.** (2022). Supporting Physical Activity in Later Life: Perspectives from Older Adults. In the Doctoral Consortium and Poster Session of *the 24th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'22)*, October 23–26, 2022, Athens, Greece.

**Yang, M.** and Moffatt, K. (2022). A Review of Empirical Studies on Persuasive Technology for Physical Activity: Common Practices and Current Trends. Poster presented at *Graphics Interface 2022 (GI'22)*, May 16–19, 2022, Montreal, QC, Canada.

**Yang, M.** and Moffatt, K. (2022). A Review of Empirical Studies on Persuasive Technology for Physical Activity: Common Practices and Current Trends. Poster presented at *the 14<sup>th</sup> EBSI-SIS Student Symposium in Information Studies*, April 28, 2022, Montreal, QC, Canada.

### Design Presentations

**Yang, M.** (May 2017). Visualizing Seasonal Change in the Chinese Garden. Master's thesis project presented and exhibited at Gallery 360, Northeastern University, Boston, U.S..

**Yang, M.** (June 2014). Blossom—Stainless Kitchen Utensils Serial Design. Undergraduate graduation design project presented and exhibited at Siyun Hall, Taiyuan Technology of University, Taiyuan, China.

## TEACHING ACTIVITIES

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**Mentoring** an undergraduate student in design ideation and prototyping for an honours research project  
Fall 2023–Winter 2024

**Teaching Assistant** of McGill Master's course INFS611 Research Principles & Analysis  
(Instructor: Dr. Ilja Frissen)  
Winter 2023

**Teaching Assistant** of McGill Master's course GLIS619 Information Behaviour and Resources  
(Instructor: Dr. Joan Bartlett)  
Fall 2021

**Guest Lecture** of McGill Master's course INFS626 Usability Analysis & Assess  
(Instructor: Dr. Karyn Moffatt)  
Winter 2023

## ACADEMIC INVOLVEMENT AND SERVICES

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### Peer Reviewer

2 late-breaking work, *ACM Conference on Human Factors in Computing Systems (CHI'24)*  
1 full paper, *ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW'24)*  
1 journal article, *ACM Transactions on Accessible Computing*  
1 journal article, *Color Research & Application*

**Student Volunteer**, ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW'21)

**Organizing Committee Member**, 13<sup>th</sup> EBSI-SIS Symposium on Information Studies 2021

**Executive Member and Communication Officer**, Association for Information Science & Technology (ASIS&T) McGill Chapter 2020 – 2021

**Community Volunteering**: Volunteer at the Yellow Door Tech Café, Montreal, QC  
(awarded *Volunteer of the Month* for August 2022) Feb. 2022 – Aug. 2023

## SKILLSET

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Data Analysis and Visualization: MAXQDA, R, Processing, JavaScript D3, p5.js + HTML

Design Tools: Adobe Illustrator/InDesign/Photoshop, Sketch, Rhino + Key Shot, Auto CAD

Sketching and rapid prototyping

Languages: fluent English, native Mandarin Chinese, basic French, basic Japanese, basic Korean