

YUMENG HOU

[Address] EPFL-CDH-DHI-eM+, Rue des Jordils 41, 1025 St-Sulpice, Switzerland

[Email] yumeng.hou@epfl.ch • [Homepage] people.epfl.ch/yumeng.hou

EDUCATION

Doctor of Philosophy in Digital Humanities École polytechnique fédérale de Lausanne (EPFL) <i>Supervisor:</i> Prof. Sarah Kenderdine	Expected Fall 2024
Master of Science in Computer Science École polytechnique fédérale de Lausanne (EPFL) <i>Dissertation title:</i> “Visualizing Personal Nutrition Intake and Emotions” <i>Supervisor:</i> Dr. Pearl Pu	2015 – 2017
Bachelor of Engineering in Digital Media Technology Zhejiang University <i>Dissertation title:</i> “Visualizing Topic Evolutions in Wikipedia” <i>Supervisor:</i> Prof. Wei Chen	2010 – 2014
Exchange Scholar in Computer and Systems Sciences Stockholm University	2013 – 2014

RESEARCH EXPERIENCE

Doctoral Researcher <i>Laboratory for Experimental Museology (eM+), DHI, EPFL</i>	2020 – present
Research Assistant <i>Visual analytics group of State Key Lab of CAD&CG, Zhejiang University</i>	2013 – 2015

TEACHING AND MENTORING

Teaching Assistant, Cultural Data Sculpting <i>Digital Humanities Institute (DHI), EPFL</i>	2020 – present
Project Mentor <i>School of Computer and Communication Sciences & Digital Humanities, EPFL</i> <ul style="list-style-type: none">Mentored two graduate students for their semester projects.Mentored six graduate students for their cross-disciplinary course projects.	2020 – present

PUBLICATIONS AND INVENTIONS

Hou, Y., Kenderdine S., et al. (In press). Digitizing Intangible Cultural Heritage Embodied: state of the art. *Journal on Computing and Cultural Heritage (JOCCH)*.

Adamou, A., Hou Y., Picca D., et al. (2021). Ontology-mediated cultural contact in Southern Chinese martial arts. In *Proceedings of the International Joint Workshop on Semantic Web and Ontology Design for Cultural Heritage (SWODCH 2021)*.

Kenderdine, S., Hibberd, L., Shaw, J., Chang, T.-Z., & Hou, Y. (in press). Archery Rites: Re-making Confucian Rites. *Chinese Archery Studies: Theoretical and Historical Approaches to a Martial Discipline*. Springer.

Xia, J., Chen, W., Hou, Y., et al. (2016). *Dimscanner*: A relation-based visual exploration approach towards data dimension inspection. In *2016 IEEE Conference on Visual Analytics Science and Technology (VAST)* (pp. 81-90). IEEE.

Xia, J., Hou, Y., Chen, Y. V., Qian, Z. C., Ebert, D. S., & Chen, W. (2017). Visualizing rank time series of wikipedia top-viewed pages. *IEEE computer graphics and applications*, 37(2), 42-53.

Invention: Xia, J., Chen, W., Hou, Y. An analysis method of multidimensional data (No. 15840696, 201707).

CONFERENCE PRESENTATIONS

- Hou, Y.** (2022). Augmenting knowledge exploration using agent-based models: A computational experiment with the *Hong Kong Martial Arts Living Archive*. Proposal submitted for presentation.
- Hou, Y.,** Kenderdine, S. (2022). Encoding the Whole-of-Environment Knowledge for Intangible Cultural Heritage. In *CANTERBURY 2022: (IN)TANGIBLE HERITAGE(S)*. Proposal accepted for presentation.
- Hou, Y.,** et al. (2021). Articulate Similarity: A Visual Search Framework For Embodied Knowledge In A Confucian Rites Video Archive. In *16th International Digital Curation Conference (IDCC21)*.
- Hou, Y.** (2021). Motion as meaning: Representing embodied knowledge in the multimodal cultural archives. In *DHCH@ISR 2021*.

PROFESSIONAL EXPERIENCE

Creative Tech Lead _box Interaction, Hangzhou, China	2019 – 2020
Product Manager RTC/Livestreaming PaaS Alibaba Cloud, Hangzhou, China	2017 – 2019
Digital Consumer Analyst EMEA Procter & Gamble, Geneva, Switzerland	2016 – 2017

UNIVERSITY SERVICE

Research Seminar Organizer Organized the Swissuniversities DH seminar, Dec 2-3, 2021, EPFL, Lausanne	2021.09 – 2021.12
PhD Student Representative Doctoral School of Digital Humanities, EPFL	2021 – present
Students' Union President College of Computer Science and Technology, Zhejiang University	2012 – 2013

EXHIBITIONS & INSTALLATIONS

- ImmerscienceVR.** An immersive learning environment. *Danling International Elementary School, Shanghai, China.*
- Natural Origins of The Internet.** Installation Art. *Museum of Inspiration, Hangzhou, China.*
- AquaA.** A Virtual Aquarium Motivating Knowledge Sharing. *Médecins Sans Frontières (MSF), Geneva, Switzerland.*

TECHNICAL SKILLS

Programming: Python, Java, JavaScript (D3.js, three.js, p5.js), R, C++, MySQL, processing, HTML/CSS, MATLAB.

Tools: Axure, InVision, Unity, Rhino, MAYA, Audition, AI, PS, Knime, Spotfire, MS Office.

LANGUAGES

Mandarin: Native or Bilingual Proficiency	French: Limited Working Proficiency
English: Full Professional Proficiency	Cantonese: Elementary Proficiency

REFERENCES

- Sarah Kenderdine,** Full Professor at Laboratory for Experimental Museology & Director of EPFL-Pavilions, EPFL.
- Jeffrey Shaw,** Chair Professor, Hong Kong Baptist University.
- Martin Alois Rohrmeier,** Assoc. Professor at Digital and Cognitive Musicology Lab & Director of EPFL-EDDH, EPFL.