

YUMENG HOU

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

[Email] yumeng.hou@epfl.ch • [Homepage] [Personal](#) | [Institutional](#) | [ORCID](#) | [Google Scholar](#)

EDUCATION

PhD in Digital Humanities , École polytechnique fédérale de Lausanne (EPFL)	Expected Oct 2024
<ul style="list-style-type: none">• <i>Thesis topic</i>: “Towards Whole-of-Environment Knowledge Encoding for Chinese Martial Arts”• <i>Supervisor</i>: Prof. Sarah Kenderdine (EMPLUS)	
Master of Science in Computer Science , École polytechnique fédérale de Lausanne (EPFL)	2015 – 2017
<ul style="list-style-type: none">• <i>Thesis title</i>: “Visualizing Personal Nutrition Intake and Emotional Response”• <i>Supervisor</i>: Dr. Pearl Pu (HCI Group)	
Bachelor of Engineering in Digital Media Technology , Zhejiang University	2010 – 2014
<ul style="list-style-type: none">• <i>Thesis title</i>: “Visualizing Topic Evolutions in Wikipedia”• <i>Supervisor</i>: Prof. Wei Chen (VAI Group)	
Exchange Student in Computer and Systems Sciences , Stockholm University	2013 – 2014

RESEARCH EXPERIENCE

Doctoral Researcher	2020 – present
<i>Laboratory for Experimental Museology (eM+), DHI, EPFL</i>	
Visiting PhD Researcher	Apr – Oct 2022
<i>Jeffrey Shaw’s lab, Academy of Visual Arts, Hong Kong Baptist University</i>	
Research Assistant	2013 – 2015
<i>Visual analytics group of State Key Lab of CAD&CG, Zhejiang University</i>	

PUBLICATIONS

Publication in Scientific Journals

- Hou, Y.* , Kenderdine S., et al. (2022). Digitizing Intangible Cultural Heritage Embodied: state of the art. *Journal on Computing and Cultural Heritage*. <https://doi.org/10.1145/3494837>
- Hou, Y.* (2021). Accessing, Representing, and Transmitting Cultural Heritage through Digital Archives: Challenges and Opportunities. *Digital Humanities Research*, 4(1), 77-91. <http://dhr.ruc.edu.cn/CN/Y2021/V1/I4/77>
- Hou, Y.* , Kenderdine S. (2022). Accessing a multimodal archive of Southern Chinese martial arts through embodied cues. *Journal of Documentation*. Under Minor Revision.
- Adamou, A.* , Hou, Y.* , Picca, D.* , et al. (2022). Ontology-mediated cultural contact in Southern Chinese martial arts. *ACM Journal on Computing and Cultural Heritage*. Under Major Revision.
- 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. <https://doi.org/10.1109/MCG.2017.21>

Peer-reviewed Conference Proceedings

- Hou, Y.* , Kenderdine S. (In press). Encoding the Whole-of-Environment Knowledge for Intangible Cultural Heritage. *AMPS Proceedings Series*.
- Picca, D.* , Adamou, A.* , Hou, Y., et al. (2022). Knowledge organization of the Hong Kong Martial Arts Living Archive to capture and preserve intangible cultural heritage. *DIGITAL HUMANITIES 2022*. July 25-29, Tokyo.
- Adamou, A.* , Hou, Y.* , Picca, D.* , et al. (2021). Ontology-mediated cultural contact in Southern Chinese martial arts. *Proceedings of the International Joint Workshop on Semantic Web and Ontology Design for Cultural Heritage*.
- 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. <https://doi.org/10.1109/VAST.2016.7883514>

Contributions to Books

Kenderdine, S.*, Hibberd, L., Shaw, J., Chang, T.-Z., & Hou, Y. (2021). Archery Rites: Re-making Confucian Rites. *Chinese Archery Studies: Theoretical and Historical Approaches to a Martial Discipline*. Springer.

TALKS & LECTURES & CONFERENCE PRESENTATIONS

“Towards digital preservation of the living heritage of traditional martial arts: the HKMALA methodology”. In *2023 Global Digital Humanities Symposium*, upcoming, online.

“Augmenting knowledge exploration using agent-based models”. In *Martial Arts Studies Conference: Martial Arts, Tradition and Globalisation*, June 29 - July 2 2022, Lausanne, Switzerland.

“Articulate Similarity: A Visual Search Framework for Embodied Knowledge in A Confucian Rites Video Archive”, *16th International Digital Curation Conference (IDCC21)*, April 19, 2021, online.

“Motion as meaning: Representing embodied knowledge in the multimodal cultural archives”, *DHCH@ISR 2021*, June 7-9, 2021, Rome, Italy.

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*.

TEACHING

Lecture , “Visualizing Embodied Knowledge System”, in course <i>Cultural Data Sculpting</i> , EPFL	Spring 2021
Lecture , “Computational Archives”, in course <i>Cultural Data Sculpting</i> , EPFL	Spring 2022
Invited Lecture , “AI for Cultural Heritage and Computational Archives”, in course <i>Digital Art History: Current Trends and Experimental Applications</i> , University of Basel	Spring 2022
Teaching Assistant , <i>DH-404 Cultural Data Sculpting</i> , 2021/2022/2023, EPFL	2021 – 2023

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

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

LANGUAGES

Mandarin (native); English (fluent); French (limited); Cantonese (limited)