YUMENG HOU

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EDUCATION

PhD in Digital Humanities, École polytechnique fédérale de Lausanne (EPFL)　　Expected Oct 2024
- *Thesis topic*: "Towards Whole-of-Environment Knowledge Encoding for Chinese Martial Arts"
- *Supervisor*: Prof. Sarah Kenderdine (eM+)

Master of Science in Computer Science, École polytechnique fédérale de Lausanne (EPFL)　　2015 – 2017
- *Thesis title*: "Visualizing Personal Nutrition Intake and Emotional Response"
- *Supervisor*: Dr. Pearl Pu (HCI Group)

Bachelor of Engineering in Digital Media Technology, Zhejiang University　　2010 – 2014
- *Thesis title*: "Visualizing Topic Evolutions in Wikipedia"
- *Supervisor*: Prof. Wei Chen (VAI Group)

Exchange Student in Computer and Systems Sciences, Stockholm University　　2013 – 2014

RESEARCH EXPERIENCE

Doctoral Researcher　　2020 – present
Laboratory for Experimental Museology (eM+), DHI, EPFL

Visiting PhD Researcher　　Apr – Oct 2022
Jeffrey Shaw's lab, Academy of Visual Arts, Hong Kong Baptist University

Research Assistant　　2013 – 2015
Visual analytics group of State Key Lab of CAD&CG, Zhejiang University

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

Kenderine, 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. *Daning International Elementary School, Shanghai, China.*

Natural Origins of The Internet. Installation Art. *Museum of Inspiration, Hangzhou, China.*

AquA. A Virtual Aquarium Motivating Knowledge Sharing. *Médecins Sans Frontières (MSF), Geneva, Switzerland.*

TEACHING

Lecture, "Visualizing Embodied Knowledge System", in course *Cultural Data Sculpting*, EPFL	Spring 2021
Lecture, "Computational Archives", in course *Cultural Data Sculpting*, EPFL	Spring 2022
Invited Lecture, "AI for Cultural Heritage and Computational Archives", in course *Digital Art History: Current Trends and Experimental Applications*, University of Basel	Spring 2022
Teaching Assistant, *DH-404 Cultural Data Sculpting, 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)