## YUMENG HOU

[Address] eM+, Rue des Jordils 41, 1025 St-Sulpice, Switzerland | [Email] yumeng.hou@epfl.ch Nationality: Chinese | Residence: Swiss Work Permit B [LinkedIn] | [Homepage] | [Google Scholar]

### **Summary**

- Skilled in technical product design and agile R&D project management, with expertise in media cloud PaaS/SaaS, office automation, and creative tech solutions.
- Research and industry experience in interdisciplinary fields, such as computational archives, cultural user experience, digital heritage, visual analytics, IoT/connected device, and mixed reality.
- Intrapreneurial and entrepreneurial mindsets combined with problem-solving and collaborative team-player attitudes.

## **Professional Experience**

### **Digital Humanities Researcher**

10/2020 - 09/2024

Laboratory for Experimental Museology (eM+), EPFL, Switzerland

- Leading research in audiovisual archiving, knowledge engineering, visual analytics and cultural AI.
- Coordinating international research collaborations, workshops, symposiums, and outreach activities.
- Lecturing in digital humanities postgraduate courses and supervising applied research projects.

### Creative Tech Lead / Advisory Board

11/2019 - 10/2020

box lab, Hangzhou/Remote, China [company page]

- Directing project specifications and technical solutions for enhancing visitor interactivity and engagement in exhibitions, museums, schools, and commercial events.
- Setting up procedures and standards for technical development, implementation, and quality assessment.
- (part-time, 10/2020 present) Advising on state-of-the-art creative technology solutions.

# Technical Product Manager / R&D Project Manager

10/2017 - 10/2019

Alibaba Cloud, Hangzhou, China [company page]

- Product owner for Real-time Communication (RTC) and Live-streaming cloud services (\$MM revenue).
- R&D project manager and scrum master for RTC and interactive live-streaming SDKs, coordinating with 20+ technical experts, as well as business development specialists and account managers.
- Conducting business analytics and market research for CDN and Cloud Media Services business unit.

### **Digital Strategist** (part-time)

12/2019 - 09/2020

NewStyle Media Group, Beijing/Hangzhou, China [company page]

- Leading solution architecture and product design for an office automation platform.
- Providing strategic advisory for digital transformation and data-driven business intelligence.

#### **Digital Consumer Analyst EMEA** (intern)

08/2016 - 01/2017

Procter & Gamble, Geneva, Switzerland [company page]

- Conducting R&D on automated business reporting procedures and prototype a solution platform.
- Conducting algorithmic research for automated customer relationship management email campaigns.

#### Co-Founder & Lead Software Engineer (startup project)

10/2015 - 10/2018

HIBACHI, Lausanne, Switzerland [company page]

- Developing the product from inception to business validation.
- Pitching to investors and incubators in Hong Kong and Switzerland.

## **Education**

Docteur ès Sciences (PhD), specializing in digital museology computational humanities	10/2020 - 08/2024
Laboratory for Experimental Museology+ (eM+), EPFL, Switzerland	
Master of Science in Computer Science	09/2015 - 10/2017
School of Computer and Communication Sciences, EPFL, Switzerland	
Bachelor of Engineering in Digital Media Technology	08/2010-06/2014
College of Computer Science and Technology, Zhejiang University, China	
Exchange Student in Human-Computer Interaction	08/2013 - 01/2014
Department of Computer and Systems Sciences, Stockholm University, Sweden	

#### **Grants and Awards**

Nomination for EPFL Doctorate Award 2024/2025: Recognition for exceptional doctoral work (pending final decision).

Finalist for Best Paper Award, Digital Humanities 2023: Recognition of high-quality research by an emerging scholar.

PI, EPFL-SNFS Doc.Mobility Grant 2022 (~C13k): A funding program to support a promising research stay abroad.

PI, Swissuniversities Support Program 2021 (~€9k): funds for organising a Digital Humanities PhD Seminar.

Recipient of the EuropeanaTech 2023 Conference Travel Bursary Award (~€600).

Lead Researcher, EPFL-UNIL CROSS Grant for Collaborative Research on Science and Society 2021-2022 (~€60k).

### **Service Activities**

### **Conference Services (selected)**

- Program Committee, 2nd International Conference on AI-generated Content (AIGC), Beijing, 21-22 Dec 2024
- Session Chair, New Paradigms for Accessing and Curating Audiovisual Collections, Lausanne, 28-29 Sep 2023
- Coordinator, Beyond Search: Opening Up Audiovisual Content for Humanities Studies, Lausanne, 25-26 Sep 2023
- Fundraiser & Coordinator, PhD Seminar on Human Factors in Digital Humanities, Lausanne, 2-3 Dec 2021

### **Keynote Speaker for High-Impact Conferences**

- The 5th International Martial Studies Conference, Aug 25 2024, Taipei
- Seminar on Digital Preservation of Cultural Heritage, Jan 5 2024, Renmin University of China, Beijing
- The 4th International Martial Studies Conference, Nov 30 2022, Guangzhou

### **Professional Memberships**

- PhD Student Representative & Doctoral School Committee Member, EPFL (2021 2023)
- Europeana Tech Community & Research Community, Europeana Network Association (2022 present)
- Member of European Association for Digital Humanities (2023 present)
- Member of AI4LAM Artificial Intelligence for Libraries, Archives & Museums (2021 present)
- Member of ACM Association for Computing Machinery (2021 present)

## Peer Reviewer for High-Impact Journals

### Language and Skills

Language: Mandarin (native), English (proficient), French (intermediate, B1/B2), Cantonese (elementary).

Knowledge Fields: Cultural Heritage, Digital Archives, Semantic Web, Machine Learning, User Experience (UX), Data

Visualization, Visual Analytics, VR/AR/XR, Digital/Virtual Museum, Motion Capture, Cloud Solution, HCI

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

Tools: UE4, Unity, Axure, Media Processing (DaVinci, Photoshop, Audition, AI, etc), Neo4j, Knime, MS Office, etc.

Others: Southern Chinese Martial Arts, Archery, Musical Keyboard, Jazz Drumming, Ballet, Yoga

# **Selected Publications**

\* Please refer to my [Google Scholar] profile for a comprehensive portfolio

Hou, Y.\* & Kenderdine, S. (2024). "Ontology-based Knowledge Representation for Traditional Martial Arts". *Digital Scholarship in the Humanities*, 39(2), 575-592. doi: 10.1093/llc/fqae005

Hou, Y.\*, Seydou, F., & Kenderdine S. (2023). "Unlocking a multimodal archive of Southern Chinese martial arts through embodied cues". *Journal of Documentation, Special Issue on AI for Cultural Heritage*. doi: 10.1108/JD-01-2022-0027

Hou, Y.\* & Yuan, L. (2023) "Building a knowledge graph of Chinese kung fu masters from heterogeneous bilingual data". *Journal of Open Humanities Data*, Vol 9, No. 27, 1-12. doi: 10.5334/johd.136

Hou, Y.\*, Kenderdine S., et al. (2022). "Digitizing Intangible Cultural Heritage Embodied: state of the art". *Journal on Computing and Cultural Heritage* (SCIE, AHCI), 15(3), No. 55, 1-20. doi: 10.1145/3494837

### Selected Exhibitions, Installations, and Creative Works

**Collaborative Researcher**. Transforming Lingnan Martial Arts as a Movement and Performing Art through Digital Pedagogy, Interpretation and Performance, 2021-2023. [website]

**Co-curator.** Digital Experience Centre for Chinese Classical Poetry Culture in Keqiao, 2020-2021. In collaboration with \_box Interaction Co. Ltd and Xinhua Zhiyun Technology Co. Ltd. [demo]

**Creation Team.** *Harper's Bazaar Icons Party Shanghai*, 2021. for interactive installations, with \_box Interaction Co. Ltd. [demo] *Natural Origins of The Internet*. Data Art, permanent installation at the 2050 Museum of Inspiration, Hangzhou. [demo]

Creator. ImmerScience. An immersive, interactive learning space created for Daning International School, Shanghai. [demo]

Creator. MOOC Learning Flow. A visualization of online learning clickstream patterns with outcome prediction. [demo]