

YUMENG HOU

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Nationality: Chinese | Residence: Swiss Work Permit B

[LinkedIn] | [Homepage] | [Google Scholar]

Summary

- Highly skilled in data visualization, visual analytics, data-driven research and decision-making.
- Proficient in technical product design and agile R&D project management, with expertise in artificial intelligence, cloud solutions (PaaS/SaaS), office automation, API solutions, and media technologies.
- Research and industry experience in interdisciplinary fields, focusing on user experience and interaction strategies.
- 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	
<ul style="list-style-type: none">• 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]	
<ul style="list-style-type: none">• 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]	
<ul style="list-style-type: none">• 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]	
<ul style="list-style-type: none">• 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]	
<ul style="list-style-type: none">• 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]	
<ul style="list-style-type: none">• 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	

Service Activities

Peer Reviewer for Top-Tier Journals

2022 – now

Conference Services

- Program Committee, *2nd International Conference on AI-generated Content (AIGC)*, Beijing, 21-22 Dec 2024
- Scientific Committee, *Going global? Chinese popular culture(s) and cultural platforms' international contraflows*, Communication University of China, Beijing, Nov/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

PhD Student Representative, EPFL

2021 – 2023

Committee Member Doctoral School of Digital Humanities, EPFL

2021 – 2023

Professional Associations

- Member of 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)

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 (~€13k): 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).

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](#)

Xia, J., Hou, Y., et al. (2017). Visualizing rank time series of wikipedia top-viewed pages. *IEEE computer graphics and applications*, 37(2), 42-53.

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. [\[demo\]](#)

Language and Skills

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

Knowledge Fields: Data Science, Data Visualization, Visual Analytics, Semantic Web, Machine Learning, Digital Curation, User Experience (UX), HCI, Mixed Reality, Media Technologies, Cloud Solution, Requirement Analysis, Product Design, API

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.