

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

- 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.
- Managing news and content publication for the lab's official website and institutional outreach.

Creative Tech Lead / Advisory Board 11/2019 – 10/2020

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

- Directing the development of creative interfaces and technical solutions for exhibitions and museums.
- Coordinating with customer and design teams to develop project specifications and solutions
- 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

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 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](#)]

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*, 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.

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.