

YUMENG HOU

[Address] eM+, Rue des Jordils 41, 1025 St-Sulpice, Switzerland | [Email] yumeng.hou@epfl.ch
[LinkedIn] | [Homepage] | [Google Scholar]

SUMMARY

- Research and industry experience spanning diverse interdisciplinary initiatives to bridge computational developments with humanities and business application scenarios.
- Experienced in technical product design and agile R&D management, including PaaS/SaaS and creative tech solutions.
- Educational and research excellence in computational humanities, analytics, digital creativity, and applied data science.
- Intrapreneurial and entrepreneurial mindsets combined with problem-solving and collaborative team-player attitudes.

EXPERIENCE

Doctoral Researcher Laboratory for Experimental Museology (eM+), EPFL, Switzerland	10/2020 – 06/2024
<ul style="list-style-type: none">• Conducting research in computational humanities, digital heritage, and computational (cultural) archives.• Coordinating collaborations between the lab and scholars across Europe, Asia (Hong Kong), and Oceania.• Lecturing and mentoring in the digital-humanities postgraduate course DH-404 Cultural Data Sculpting.• Supervising postgraduate research projects in computational humanities and applied data science for cultural data, including three semester projects and six applied projects.• Serving as PhD Student Representative for EPFL's Doctoral School of Digital Humanities (2021-2023).	
Creative Tech Lead / Advisory Board _box lab, Hangzhou/Remote, China [company page]	11/2019 – 10/2020
<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 and practices for multisensory spaces, interactive stages, and digital museums.	
Technical Product Manager / R&D Project Manager Alibaba Cloud, Hangzhou, China [company page]	10/2017 – 10/2019
<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) NewStyle Media Group, Beijing/Hangzhou, China [company page]	12/2019 – 09/2020
<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) Procter & Gamble, Geneva, Switzerland [company page]	08/2016 – 01/2017
<ul style="list-style-type: none">• Coordinating with business departments to design automated business reporting procedures and prototype a solution platform.• Conducting algorithmic research for automated customer relationship management email campaigns.	

EDUCATION

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

SERVICE ACTIVITIES

Conference Services

- **Program Committee**, The 2nd International Conference on AI-generated Content (AIGC 2024), Dec 21-22, 2024
- **Panel Chair**, Charting the European D-SEA: Digital Scholarship in East Asian Studies, Jul 8-12, 2024
- **Panel Chair**, New Paradigms for Accessing and Curating Audiovisual Collections, 28-29 September 2023
- **Coordinator**, Beyond Search: Opening Up Audiovisual Content for Humanities Studies, Sep 25-26, 2023
- **Coordinator & Fundraiser & Editor**, PhD Seminar on Human Factors in Digital Humanities, Dec 2-3 2021

Peer Review Activities

- *High-impact academic journals*: Digital Scholarship in the Humanities, Cogent Social Sciences, International Journal of Heritage Studies, Heritage Science, Journal of Human-Computer Interaction, Multimedia Tools and Applications, International Journal of Open Humanities Data
- *High-impact conferences*: Digital Humanities 2023, MOCO'24, AIGC 2024, IEEE VIS 2024

Voluntary Guest Lectures

- “Ontology Approach to MoCap Archives”, for *MetaTool Team* at Delft University of Technology, April 30 2023
- “Building and Disrupting the Hong Kong Martial Arts Living Archive”, in *Seminar on Digital Preservation of Cultural Heritage*, Renmin University of China, 5 Jan 2024
- “Computational Museology”, in *Digital Art History*, postgraduate class at University of Basel, 8 April 2022

Academic Memberships

- 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 & AWARDS

Finalist for Paul Fortier Prize (Best Paper Award by an emerging scholar) at Digital Humanities 2023.

Recipient of the Europeana Network Association Member Grant for attending EuropeanaTech 2023 (~€500).

Recipient & PI of the EPFL Doc.Mobility Grant 2022 (~€12,000).

Lead Researcher of the EPFL-UNIL Grant for Collaborative Research on Science and Society 2021-2022 (~€60,000).

Applicant & Coordinator of the *Swissuniversities* Support Program for Academic Activities (~€8,000).

SKILLS

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

Knowledge Fields: Data Visualization, Visual Analytics, Machine Learning, Semantic Web, User Experience (UX), HCI, Cloud Solution, Mixed Reality (VR/AR), Digital/Virtual Museum, Digital Archives, Cultural Heritage, Motion Capture

Technical Tools: Axure, Neo4j, Knime, Tableau, Unreal Engine, Unity, Media Processing (e.g., DaVinci, Photoshop)

Soft Skills: Product Design and Management, Agile & Scrum, Communication, Data-driven, Team Spirit, Empathy

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

Other skills: Southern Chinese Martial Arts, Archery, Musical Keyboard, Jazz Drumming, Ballet, Yoga.

SELECT PUBLICATIONS

**For a comprehensive portfolio of my publications, conference presentations, and talks, please refer to [[My Research](#)].*

Hou, Y.* & Kenderdine, S. (2024). “Ontology-based Knowledge Representation for Traditional Martial Arts”. *Digital Scholarship in the Humanities*. doi: [10.1093/llc/fqae005](https://doi.org/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*. doi: [10.1108/JD-01-2022-0027](https://doi.org/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, pp.1-12. doi: [10.5334/johd.136](https://doi.org/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, pp.1-20. doi: [10.1145/3494837](https://doi.org/10.1145/3494837)

Xia, J.¹, **Hou, Y.¹**, 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), pp.42-53. doi: [10.1109/MCG.2017.21](https://doi.org/10.1109/MCG.2017.21)

Xia, J., Chen, W.*, **Hou, Y.**, et al. (2016). “*Dimscanner*: A relation-based visual exploration approach towards data dimension inspection”. In *Proceedings of 2016 IEEE Conference on Visual Analytics Science and Technology (VAST)*, pp.81-90. IEEE. doi: [10.1109/VAST.2016.7883514](https://doi.org/10.1109/VAST.2016.7883514)