

YUMENG HOU

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[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.

EXPERIENCE

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|---|-------------------|
| 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 in the digital-humanities postgraduate course Cultural Data Sculpting, and supervising master's thesis/practical projects in computational humanities and applied data sciences. | |
| 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. | |
| 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. | |
| Co-Founder & Lead Software Engineer (startup project) HIBACHI, Lausanne, Switzerland [company page] | 10/2015 – 10/2018 |
| <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

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|---|-------------------|
| 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

Academic Conference Services

- **Program Committee**, The 2nd International Conference on AI-generated Content (AIGC 2024), Dec 21-22, 2024
- **Session 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

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)

Selected Exhibitions, Installations, and Creative Works

Digital Experience Centre for Chinese Classical Poetry Culture, Keqiao edition, 2020-2021. **Co-curator**. [\[demo\]](#)
Harper's Bazaar Icons Party Shanghai, 2021. **Creation Team** for interactive installations, with _box Interaction Co. Ltd. [\[demo\]](#)
Natural Origins of The Internet. **Artist**. Data Art, permanent installation at the 2050 Museum of Inspiration, Hangzhou. [\[demo\]](#)
ImmerScience. **Creation Team** An immersive, interactive learning space created for the Daning School, Shanghai. [\[demo\]](#)
AquaA. **Designer**. A virtual aquarium to motivate knowledge sharing activities among medical practitioners in Africa. [\[demo\]](#)
EmovDiary. **Designer & Developer**. A visual interactive data journal for reviewing nutrition intake and emotion flows. [\[demo\]](#)
MOOC Flow. **Designer & Developer**. Visualization of online learning behavior patterns with outcome prediction. [\[demo\]](#)

SELECT PUBLICATIONS

*For a comprehensive portfolio of my articles, conference presentations, lectures, 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/lle/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](#)

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](#)

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](#)

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](#)

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 RP, 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.