

Ivan Chen-Hsiu Liu

DR. RER. NAT., MSCI, ARCS
RESEARCHER · ARTIST

Institute of Applied Arts

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Professional Experience

- 2021- **Assitant Professor**, National Yang Ming Chiao Tung University, Taiwan
- 2013-2021 **Founder and Artistic Director**, Legacy Lab International
- 2014 **Resident Artist**, iMAL, Brussels, Belgium
- 2009-2012 **Researcher**, Industrial Technology Research Institute, Taiwan
- 2008-2009 **Postdoctoral Researcher**, Max-Planck Institute for the Physics of Complex Systems, Dresden, Germany
- 2007 **Guest Researcher**, National Center for Scientific Research (CNRS), France

Education

Max-Planck Institute for the Physics of Complex Systems

DR. RER. NAT. THEORETICAL PHYSICS

- Advisor: Prof. Dr. Jan-Michael Rost

Dresden, Germany

2003 - 2008

Imperial College London

MSCI PHYSICS

- Advisor: Prof. Derek Lee

London, United Kingdom

1999 - 2003

Exhibitions

- 2025 **Ars Electronica**, Linz, Austria
- 2025 **Bauhaus Museum**, Weimar, Germany
- 2025 **30th ISEA**, Seoul, South Korea
- 2025 **L.E.V. Festival**, Gijón, Spain
- 2024 **30th IRCAM Forum, IRCAM**, Paris, France
- 2023 Kaohsiung Museum of Fine Arts, Kaohsiung, Taiwan
- 2023 C-Lab Sound Festival: Diversonics, C-Lab, Taipei, Taiwan
- 2023 In the Name of Mountains, Mingshan Art, Taipei, Taiwan
- 2022 Perceiving Nature, Hsinchu Museum of Art, Hsinchu, Taiwan

Awards

- 2017 **National Fine Art Award**, National Taiwan Museum of Fine Arts
- 2015 **First Prize, Star of Creative Industry Award**, Ministry of Culture, Taiwan
- 2015 **Nomination, The 6th Digital Arts Performance Award**, Taiwan
- 2014 **Distinction, Public Space Design, Taipei International Design Award**, Taiwan

Catalogued Artworks

- [2] **Liu, I.** (2025) "Echoes of the Land." In Art Center Nabi (Ed). ISEA2025 Seoul: Creators' Universe (p. 52). Seoul: Art Center Nabi. ISBN 979-11-87275-31-2
- [1] **Liu, I.** (2025). "Echoes of the Land." In G. Stocker & M. Jandl (Eds.), Ars Electronica 2025: Festival for Art, Technology & Society – yes / no PANIC (pp. 18–21). Hatje Cantz Verlag. ISBN 978-3-7757-6083-6

Artwork Acquisition

- 2021 *Flying Mountain: Taiwan@3628M*, National Taiwan University, Taiwan
 2018 *Water City*, Imperial College London, UK
 2013 *Penrose's Dream*, Le Médirien Taipei, Taiwan

Courses Taught

Introduction to Tech-Art · Experimental Media Art and Design · Complexity and Aesthetics · Digital Design and Fabrication · Generative Art and Design · Curatorial Workshop · Research Methods

Professional Services

PEER REVIEW

- AI & Society (Springer)
- Cogent Arts & Humanities (Taylor & Francis)
- SIGGRAPH ASIA
- International Symposium on Electronic Art (ISEA)
- International Symposium on Visual Information Communication and Interaction (VINCI)
- International Journal of Digital Media Design (Taiwan Association of Digital Media Design)
- Arts Review (Taipei University of Arts)

ORGANIZING COMMITTEE

- 2022 Co-Chair, International Symposium on Visual Information Communication and Interaction (VINCI)

GRANT REVIEW

- National Culture and Arts Foundation, Taiwan
- National Science and Technology Council, Taiwan
- Ministry of Culture, Taiwan
- Other Various Governmental Projects

PUBLIC

- 2015-2022, 2023-Present, **Advisor**, Taipei City Government
- 2015-2021 **Founding President**, Imperial College Alumni Association in Taiwan
- 2012-2013 **President**, Rotary Club of Taipei Generation Next

Publications

SUBMITTED

- Chen, P. H. & **Liu, I. C. H.** (2026). "Optimization and Mobile Deployment for Anthropocene Neural Style Transfer". Submitted to SIGGRAPH 2026. Preprint: arXiv:2601.21141
- Hao, C. E. & **Liu, I. C. H.** (2026). "Revealing Latent Self-Similarity in Cellular Automata via Recursive Gradient Profiling". Submitted to SIGGRAPH 2026. Preprint: arXiv:2601.17361
- Liu, I. C. H.** (2025) "Art Practice for Sustainability: A Cognitive-Affective-Systemic Framework". Submitted to Digital Creativity. Preprint: arXiv:2510.17083
- Liu, I. C. H.**, Hao, C. E. & Xie, J. (2025) "Echoes of the Land: An Interactive Installation based on Physical Model of Earthquake". Submitted to Leonardo. Preprint: arXiv:2507.14947

PUBLISHED

- [8] **Liu, I. C. H.** (2024). "Narrating global emerging issues with complexity-inspired installations". Proceedings of 2024 International Symposium on Electronic Arts. Preprint: SocArXiv: <https://doi.org/10.31235/osf.io/msqxy>
- [7] Chen, H. W. & **Liu, I. C. H.** (2024). "Speculating on emerging quantum aesthetic styles with Midjourney: A preliminary study". The 2024 International Conference on Taiwanese Association of Digital Media Design. (In Chinese, available upon request)
- [6] Xie, J., Hao, C. E. & **Liu, I. C. H.** (2024). "Immersive Interactive Art and Aesthetic Experience Based on Seismic Science Model". The 7th International Symposium on Art and Technology. (In Chinese, available upon request)
- [5] **Liu, I. C. H.** (2023). "Complexity, Environment and Future Aesthetics: From New Media to Non-Media". The 13th SAR Conference on Artistic Research. Preprint: SocArXiv: <https://doi.org/10.31235/osf.io/njevww>

- [4] Hsu, Y. C. & **Liu, I. C. H.** (2022). "Arts in the Anthropocene: Application of Neural Style Transfer". The 2022 International Conference on Taiwan Institute of Kansei and Taiwan Association of Digital Media Design. (In Chinese, available upon request)
- [3] Hao, C. E. & **Liu, I. C. H.** (2022). "Complex Systems and Sound Aesthetics: Granular Synthesis and Many-Body Induced Sound". The 2022 International Conference on Taiwan Institute of Kansei and Taiwan Association of Digital Media Design. (In Chinese, available upon request)
- [2] **Liu, I. C. H.**, Stanojevic, J. & Rost, J. M. (2009). "Ultra-Long-Range Rydberg Trimers with a Repulsive Two-Body Interaction". *Phy. Rev. Lett.* 102 (17), 173001
- [1] **Liu, I. C. H.** & Rost, J. M. (2006). "Polyatomic molecules formed with a Rydberg atom in an ultracold environment". *Eur. Phys. J. D* 40 (1), 65-71. Preprint: arXiv:physics/0512059