

Shano Liang

PhD Candidate in Computational Media

Human-Computer Interaction || Data Visualization || Interactive Media & Game Studies

- **Pronouns:** She/her
 - **Known Aliases:** Hongyuan Liang 梁鸿源
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 - **Last Update:** May 30, 2026

EDUCATION

- Sept. 2021 - 2027 **PhD in Computational Media (expected)** | Worcester Polytechnic Institute (WPI), Worcester, MA, USA
 Advisors: Lane Harrison and Phoebe O Toups Dugas (external)
- Aug. 2019 - Dec. 2021 **Master of Science in Interactive Media & Game Development** | Worcester Polytechnic Institute (WPI), Worcester, MA, USA
 Advisors: Gillian Smith and Jennifer deWinter
- Sept. 2014 - May. 2018 **Bachelor of Fine Arts in Animation & Game Arts** | Hubei Institute of Fine Arts (HIFA), Wuhan, Hubei, China

EXPERIENCE

- May 2023 - Present **Research Assistant** | WPI Computer Science Department
 Conducted research projects and publications in human-computer interaction (HCI) and data visualization. Received an Honorable Mention Award for Best Paper at the ACM Conference on Human Factors in Computing Systems (CHI). Joined the WPI VIEW Lab in December 2024 as an interdisciplinary research member to explore visualization infrastructure development, and experiential and playful interactive visualization.
- Aug. 2022 - May 2023 **Teaching Assistant** | WPI Interactive Media & Game Development
 Assisted instructors and provided mentorship and learning support to students across multiple IMGD courses, including IMGD-2740 (3D Environmental Modeling), IMGD-2500 (Design of Tabletop Strategy Games), and IMGD-4099-D01 (Ethics of Creative AI).
- Aug. 2021 - May 2022 **Teaching Assistant** | WPI Academic & Research Computing (ARC)
 Provided AR/VR training & technical consultation to students and faculty. Led and facilitated the 3D virtual tour creation.
- Sept. 2020 - Present **Senior Member** | WPI Intentional Design Studio
 Provided support and participated in the development of projects on VR/AR apps and educational games. Provided mentorship and technical support to students, fostering a collaborative and innovative environment.
- Dec. 2021 - May 2022 **Contract Game Developer** | Petricore, Inc.
 Designed, modeled, and textured high-poly 3D assets for 3D environments and level layouts for the game Battle Billiards.
- Mar. 2017 - May 2018 **Invited Faculty Advisor** | Computer Graphics Society at No.1 Middle School Affiliated to Central China Normal University (CCNU)
 Invited to design and deliver introductory courses on digital arts, 2D/3D modeling, and visual design for high school students. Guided students through hands-on creative projects, fostering their technical skills and artistic expression.
- Feb. 2015 - Aug. 2018 **Company Founder and Lead Producer** | Wuhan KBOOM Network Tech Co. Ltd.
 Led and developed an award-winning board game collaboratively with my team. Founded a game company to turn game development into a startup. Partnered with over a dozen well-known game stores in Wuhan, and over 500 copies of the game were sold in physical form in Wuhan city.

PUBLICATIONS

Journal Articles

- 2026 Max Chen, **Shano Liang**, Bastión Toledo-Altamirano, Elizabeth Papa, Crow Zubrick, Thea Cloyd. Developing A Video Game with Gender Euphoria Themes: A Postmortem of Rainborough. *Journal of Games, Self, & Society, Volume 4, 2026*.
<https://doi.org/10.17613/wvepr-20076>
- 2025 **Shano Liang**, Michelle V Cormier, Phoebe O Toups Dugas, Rose Bohrer. The Three Steps to Trans Death: Introducing Trans Cyber-Necropolitics in Digital Media. *ACM Transactions on Computer-Human Interaction 32 (5), 2025 (ToCHI)*.
<https://doi.org/10.1145/3745767>
- 2025 **Shano Liang**, Max Chen, Phoebe O Toups Dugas, Gillian Smith, Rose Bohrer. The Collaborative Sensemaking Play of Jubensha Games: A Deconstruction, Taxonomy, and Analysis. *ACM Journal of Games: Research and Practice 3(1), 2025 (ACM Games)*.
<https://doi.org/10.1145/3721121>
- 2022 **Shano Liang**, Michael Anthony DeAnda. Review: Review of Poetic Operations: Trans of Color Art in Digital Media by micha cárdenas (Duke University Press). *Journal of the Cultural Studies Association 11(2), 2022*.
<https://www.jstor.org/stable/48749196>

Conference Articles

- 2026 Katie Seaborn, **Shano Liang**, Rua Mae Williams, Phoebe O Toups Dugas. Radical Gender Neutrality: Agender Euphoria in Gaming and Play Experiences. *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*. <https://doi.org/10.1145/3772318.3790659>
- 2025 **Shano Liang**, Michelle V Cormier, Rose Bohrer, Phoebe O Toups Dugas. Designed & Discovered Euphoria: Insights from Trans-Femme Players' Experiences of Gender Euphoria in Video Games. *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)*. <https://doi.org/10.1145/3706598.3714081> 🏆 **CHI '25 Honorable Mention Award**
- 2025 Michelle V Cormier, **Shano Liang**, Bill Hamilton, Nicolas LaLone, Rose Bohrer, Phoebe O Toups Dugas. This Game SUX: Why & How to Design Sh@*ly User Experiences. *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)*. <https://doi.org/10.1145/3706598.3713246>
- 2025 Rose Bohrer, **Shano Liang**, Michelle V Cormier, Takao Fujii, Phoebe O Toups Dugas, Rua Mae Williams, Amy J Ko, Katie Seaborn, Oliver L Haimson. Transnational lgbTq+ SIG. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems 2025 (CHI '25)*. <https://doi.org/10.1145/3706599.3716287>
- 2025 Phoebe O Toups Dugas, Bhavani Seetharaman, Rebecca J Fleming, **Shano Liang**, Don Samitha Elvitigala, Jennifer A Rode, Nicolas LaLone. Mobile Maps Continue to Fail Pedestrians: Synthesised Reflective Auto-Aggro-Ethnographies of Walking. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems 2025 (CHI '25)*. <https://doi.org/10.1145/3706599.3716217>
- 2023 **Shano Liang**, Michelle V Cormier, Phoebe O Toups Dugas, Rose Bohrer. Analyzing Trans (Mis)Representation in Video Games to Remediate Gender Dysphoria Triggers. *Proceedings of the ACM on Human-Computer Interaction CHI PLAY, 2023*. <https://doi.org/10.1145/3611034>
- 2023 Max Chen, **Shano Liang**, Gillian Smith. Stackable Music: A Marker-Based Augmented Reality Music Synthesis Game. *Companion Proceedings of the Annual Symposium on Computer-Human Interaction in Play, 2023*. <https://doi.org/10.1145/3573382.3616071>

Workshops

- 2024 Rachel Donley, **Shano Liang**, Ari Gass, Anne Sullivan. Workshop on Queer Play. *Proceedings of the 19th International Conference on the Foundations of Digital Games, 2024 (FDG '24)*. <https://sites.gatech.edu/queerplay/>

Talk & Panel Discussions

- 2025 Max Chen, **Shano Liang**, Bastión Toledo-Altamirano, Elizabeth Papa, Crow Zubrick, Thea Cloyd. Developing A Video Game with Gender Euphoria Themes: A Postmortem of Rainborough. *Panel Discussion at Games for Good Conference, 2025*
- 2024 **Shano Liang**, Max Chen, Phoebe O Toups Dugas, Gillian Smith, Rose Bohrer. Exploring the Complexity of Jubensha: A Taxonomy and Analysis of Chinese Murder Mystery Role-Playing Games. *Proceedings of the 19th International Conference on the Foundations of Digital Games, 2024 (FDG '24)*
- 2022 **Shano Liang**. The Impact of Juvenile Video Gaming Restrictions. *Presentation at the Canadian Game Studies Association Annual Conference (CGSA), June 2022*
- 2022 Robert Dempski, Andrew R Teixeira, Claire Li, **Shano Liang**, Max Chen. Integrating Immersive Learning Tools across Campus and Beyond. *Advanced Manufacturing and Processing Conference (AICHE), Mar 2022*. <https://aiche.confex.com/aiche/ampc20/meetingapp.cgi/Paper/651137>

SERVICE

- 2026 **Program Committee Associate Chair** | ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play 2026, Work-In-Progress (WiP) Subcommittee (CHI PLAY WIP '26)
- 2026 **Conference Reviewing** | ACM Designing Interactive Systems Conference (DIS '26)
- 2026 **Conference Reviewing** | ACM Conference on Human Factors in Computing Systems 2026 (CHI '26)
- 2026 **Journal Reviewing** | Journal of Gaming & Virtual Worlds (JGVW)
- 2025 **SIG (Special Interest Group) Organizer** | the Transnational lgbTq+ SIG of ACM Conference on Human Factors in Computing Systems 2025 (CHI '25)
- 2025 **Conference Reviewing** | ACM Conference on Human Factors in Computing Systems 2025 (CHI '25)
- 2025 **Conference Reviewing** | ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play 2025 (CHI PLAY '25)
- 2025 **Conference Reviewing** | alt.chi of ACM Conference on Human Factors in Computing Systems 2025 (alt.CHI '25)
- 2024 **Journal Reviewing** | Journal of Gaming & Virtual Worlds (JGVW) Special Issue
- 2024 **Workshop Organizer** | the Queer Play Workshop of ACM Foundations of Digital Games 2024 (FDG '24)
- 2024 **Conference Reviewing** | ACM Foundations of Digital Games 2024 (FDG '24)
- 2023 **Conference Reviewing** | ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play 2023 (CHI PLAY '23)

2020 - 2022 **Graduate Student Representative** | WPI School of Arts & Sciences Student Advisory Council

GRANTS AND AWARDS

- 2025 **MIT Reality Hack Art Grant** | MIT Reality Hack
\$500 Art Grant awarded for creative project at MIT Reality Hack.
- 2025 **Award of Honorable Mention for Best Paper (1st author)** | ACM Conference on Human Factors in Computing Systems 2025 (CHI '25)
- 2023 - 2026 **WPI Research Assistant** | Worcester Polytechnic Institute
- 2021 - 2023 **WPI Teaching Assistant** | Worcester Polytechnic Institute
- 2019 **2nd Place, Game Jam Competition in Shanghai** | China Indie Game Alliance (CIGA)
48-Hour Rapid Indie Game Development Competition
- 2018 **1st Place, Culture Creative Design Competition for College Students in Hubei Province** | Hubei Provincial Education Bureau
80,000 CNY (~\$11,428) awarded.
- 2018 **Outstanding Graduation Project** | Hubei Institute of Fine Arts (HIFA)
5,000 CNY (~\$714) awarded.
- 2018 **1st Place, Institutional Outstanding Graduation Work** | Joint Exhibition of National Top Institutions of Higher Learning in Fine Arts, and Hubei Institute of Fine Arts (HIFA)
1 selected from ~2,000 graduation works.
- 2017 **National Scholarship** | Hubei Provincial Education Bureau, and Hubei Institute of Fine Arts (HIFA)
1st in the Institute department; 3rd in the Institute. 20,000 CNY (~\$2,857) awarded.
- 2016 **3rd Place, Hubei Provincial "Chuangqingchun" College Student Entrepreneurship Competition** | Hubei Provincial Government Joint Departments (including Youth League Committee, Dept. of Education, and Dept. of Science & Technology), China
10,000 CNY (~\$1,428) awarded.

SKILLS

Digital Art, Animation, & Audio: 2D Art (Adobe Creative Suite such as Photoshop and Illustrator); 3D Art (Autodesk 3ds Max, Autodesk Maya, Maxon Zbrush); PBR Workflow (Adobe Substance 3D Suite such as Substance Painter and 3D Designer); Film Making & Animation (Adobe After Effects, Media Encoder, Flash, etc.); Skeletal/Bone Animation (Live2D, Spine 2D, DragonBones, etc.); Audio (Adobe Audition and FL Studio)

Programming & Web Development: Python, C#, C++, TypeScript, JavaScript; Web frameworks & APIs (reVISit, Vega, Node.js, Three.js, D3.js, Jupyter Notebook, Figma, etc.); Cloud & DevOps (Unity Cloud and GitHub)

Creative Coding & Interactive Media: Game Engines (Unity and Unreal); XR/AR/VR frameworks (AR Foundation, OpenXR, XR Toolkit, Vuforia, Oculus Integration); Media & AI Tools (Processing, OpenCV, OpenAI API, etc.)

Physical & Tangible Computing: Arduino, Raspberry Pi, sensor integration; Digital fabrication (3D printing, laser/vinyl cutting, CNC); Electronic prototyping

Fine Art: Digital painting, Glue printing, Gouache painting, Photography, Deco Art, Visual communication art, Experimental short film

Others: Bartending (trained), Cartography (Entrance level), Cooking (Wuhan cuisine)