Max Chen

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🗓 **Last Update**: October 9, 2025

EDUCATION

2022 – 26*   **PhD in Computational Media** (*expected)
Worcester Polytechnic Institute (WPI), Worcester, MA

Dissertation: Towards Human-centered Game Development
Advisor: Gillian Smith
Committee Members: Erin Solovey, Karen Stewart, and Anne Sullivan

2020 – 22   **Master of Science in Interactive Media & Game Development**
Worcester Polytechnic Institute (WPI), Worcester, MA

Thesis: Impact of Brain-Computer Interface Informed Visual Effect Adaptation in a Walking Simulator
Advisors: Gillian Smith and Erin Solovey

2016 – 20   **Bachelor of Engineering in Pharmaceutical Engineering**
Wuhan University of Technology (WHUT), Wuhan, China

PROFESSIONAL EXPERIENCES

2021 – Present   **Research Assistant |** WPI Academic & Research Computing, Worcester, MA

I provide augmented reality (AR) and virtual reality (VR) training & technical consultation to students and faculty, and lead training sessions on creating 3D virtual tours.

2023 – Present   **Graduate Assistant |** Massachusetts Digital Games Institute (MassDigi)

I maintain the technical infrastructure for the mobile game development pipeline. In the summer of 2023, I mentored 42 students across seven teams in creating mobile games during the Summer Innovation Program, a professionalization program designed for college students and early-stage game developers.

2020 – Present   **Senior Member |** WPI Intentional Design Studio

I mentor student projects on web development, VR/AR, and educational games, supporting them through every stage from ideation to long-term maintenance.

PUBLICATIONS

Journal Articles

2025   Shano Liang, **Max Chen**, Phoebe O. Toups Dugas, Gillian Smith, and Rose Bohrer. The Collaborative Sensemaking Play of Jubensha Games: A Deconstruction, Taxonomy, and Analysis. ACM Games: Research and Practice. **(ACM Games)** https://doi.org/10.1145/3721121

2024   **Max Chen**, Yichen Li, Hilson Shrestha, Noëlle Rakotondravony, Andrew Teixeira, Lane Harrison, and Robert E. Dempski. 2024. FlowAR: A Mixed Reality Program to Introduce Continuous Flow Concepts. Journal of Chemical Education. **(Featured on Cover)** https://doi.org/10.1021/acs.jchemed.3c00807

Conference Articles

2025   **Max Chen** and Gillian Smith. Bridging Cultural Representation and Game Making: Analyzing the Experiences, Outcomes, and Lessons of Early-Stage Game Developers in a Professional Development Program, The Annual Symposium on Computer-Human Interaction in Play **(CHI PLAY)** (Acceptance Rate: 24.1%) https://doi.org/10.1145/3748627

2025   Yucheng Li, Yanan Wang, Mengyuan Xiong, **Max Chen**, Yifan Yan, Junxian Li, Qi Wang, and Preben Hansen. AromaBite: Augmenting Flavor Experiences Through Edible Retronasal Scent Release. In Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems **(CHI LBW)** (Acceptance Rate: 32.7%) https://doi.org/10.1145/3706599.3720200

2025   **Max Chen** and Edward Morrell. Exploring the Purpose and Development of Academic Games: An Analysis of Games Reported at the Foundations of Digital Games Conference (2007–2024). In Proceedings of the 20th International Conference on the Foundations of Digital Games **(FDG)** (Acceptance Rate: 50.0%) https://doi.org/10.1145/3723498.3723823

2024   **Max Chen** and Gillian Smith. Game Development as Project-Based Learning: Synthesizing Postmortems of Student-Created Mobile Games. In Proceedings of the 19th International Conference on the Foundations of Digital Games **(FDG)** (Acceptance Rate: 43.0%) https://doi.org/10.1145/3649921.3649999

2024   **Max Chen**, Dashiell Elliott, Robert Dempski, and Raúl Orduña Picón. Designing Interactive Virtual Tours for Education: Two Case Studies on Virtual Tours of the Chemistry and Biochemistry Laboratories. In Proceedings of the 19th International Conference on the Foundations of Digital Games **(FDG WIP)** (Acceptance Rate: 69%) https://doi.org/10.1145/3649921.3656982

Conference Articles (Continued)

2023   **Max Chen**, Shano Liang, and Gillian Smith. 2023. Stackable Music: A Marker-Based Augmented Reality Music Synthesis Game. In Companion Proceedings of the Annual Symposium on Computer-Human Interaction in Play **(CHI PLAY WIP)** (Acceptance Rate: 45.6%) https://doi.org/10.1145/3573382.3616071

2023   **Max Chen**, Yihong Xu, Alexander Sirois, Yichen Li, Robert Dempski, Gillian Smith, Yuko Oda, Yunus Telliel, Erika S. Lewis, and Kelilah L. Wolkowicz. WheelUp! Developing an Interactive Electric-power Wheelchair Virtual Training Environment. Proceedings of the 2023 IEEE Conference on Games **(CoG)** https://doi.org/10.1109/CoG57401.2023.10333203

2023   **Max Chen**, Erin Solovey, and Gillian Smith. Impact of BCI-Informed Visual Effect Adaptation in a Walking Simulator. In Proceedings of the 18th International Conference on the Foundations of Digital Games **(FDG)** (Acceptance Rate: 38.6%) https://doi.org/10.1145/3582437.3582448

Workshop Article and Posters

2024   Josiah Boucher, **Max Chen**, Gillian Smith and Yunus Telliel. Examining the Trajectory of Early Professionals' use of Generative AI in the Game Development Process from 2023 to 2024. Experimental AI in Games Workshop, AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment **(EXAG, AIIDE)**

2025   Dashiell Elliott, **Max Chen**, Claire Li, Robert Dempski, and Raúl Orduña Picón. Extended Reality, Extending Chemistry Learning: Supporting Students in Understanding Safety and Molecular Polarity in the College General Chemistry Lab. Northeastern Chemistry Education Research Symposium

Talks, Presentations & Panel Discussions

2025   Skills for Making Video Games: Learning by Doing and Reflecting. Invited Talk at Union College, Computer Science Seminar Series

2025   Accessible Worlds? Accessibility, Design, and the Right to Play. Panel Discussion at the International Conference on Foundations of Digital Games **(FDG)**

2025   Use of AI by Researchers. Panel Discussion at WPI FORW-RD NRT Program

2024   Exploring the Complexity of Jubensha: A Taxonomy and Analysis of Chinese Murder Mystery Role-Playing Games. Presentation at the International Conference on Foundations of Digital Games **(FDG)**

2023   Designing Exergames: Impact of Immersive Experience Beyond Engagement and Motivation. Invited Talk at the IEEE Virtual Reality, Workshop on VR for Exergaming **(VR4Exergame, IEEE VR)**

2022   Integrating Biophysics Immersive Learning Tools Across Campus. Contributor to the Presentation at the Building a Network of Biophysics Education Virtual Conference

2022   Integrating Immersive Learning Tools across Campus and Beyond. Contributor to the Presentation at the Advanced Manufacturing and Processing Conference

2022   The Importation of Murder Mystery Games in China – Game Localization and Creativity. Presentation at the Canadian Game Studies Association Annual Conference **(CGSA)**

TEACHING AND MENTORING EXPERIENCES

Guest Lectures

2025   An Introduction to Research
WPI IMGD 5010: IMGD Fundamentals

2025   Olfactory Displays
WPI IMGD 3100: Novel Interfaces for Interactive Environments

2024   Developing Arcade Games
WPI IMGD 1001: The Game Development Process

2024   Integrating AI tools into Life Science Workforce Development Programs
WPI CH 421X: AI in the Molecular Life Sciences

2024   Brain-computer Interfaces and Games
WPI CS 525 Special Topics in Computer Science: Brain-Computer Interaction

2023   Brain-computer Interfaces and Games
WPI IMGD 3100: Novel Interfaces for Interactive Environment

2022   Augmented Reality for Climate Change Awareness
Massachusetts College of Art and Design Artward Bound Program

Undergraduate Mentoring - Major Qualifying Projects

2025 - 26	Promoting Collaborative Learning in Architectural Engineering Design with Generative Artificial Intelligence-powered Augmented Reality (Students: Maxwell Wiesenfeld, Nathaniel Powers)
2025 - 26	Gaming-Inspired Human Machine Interfaces for One-to-Many Control of Robotic and Autonomous Systems (Students: Nicholas Giangregorio, Shengce Zhou, and Brendan Reilly)
2023 - 24	Developing a Brain-Computer Interface to Enhance Storytelling in Games with the Identification of Cognitive States (Students: Jagger Polvino, James Cao, and Andrew Nguyen)
2022 - 23	Sewn into Memory: Reliving Feelings through an AR Quilt (Students: Amanda Jones, Megan Letendre, and Elise Nerden)

Undergraduate Mentoring – Research Projects

2024	Project AdSense: An Early Internet Scroller (Students: Ian Tschida, Lana Acevedo, Gale Clark)
2024	Integration of Remote Data Logging with Mixed Reality (Students: Khang Luu, Ruichun Wang, Reilly Desai)
2024	Designing Virtual Tours for Chemistry and Biochemistry Laboratories (Student: Dashiell Elliott)
2023	Developing Mixed Reality User Interface with Unity (Student: Reilly Desai)
2022	Building Interactive Augmented Reality Applications for HoloLens with Unity (Student: Amanda Jones)
2022	Developing a Powered Wheelchair Virtual Training Environment with Unreal (Student: Yihong Xu)
2022	Co-design an Augmented Reality Book with Educators and Students (Student: Rachel Foye, Ava Stockton, and Dinah Agyemang)

GRANTS AND AWARDS

2025	Outstanding Review Recognition
	CHI, Late Breaking Work
	CHI PLAY, Late Breaking Work
	ACM Conference on Designing Interactive Systems **(DIS)**
2025	MIT Reality Hack Art Grant (Awarded $500)
2023	WPI Graduate Student Travel Award (Awarded $500)
2023	Foundations of Digital Games Travel Assistance Program (Awarded $900)
2023	Supporting WPI Women in STEM Education Research (Co-PI, $11,478)

SERVICE

Conference & Journal Reviewing

2025	**DIS**
2024-25	**FDG**
2024-25	**CHI**, Case Studies, Late Breaking Work
2024-25	**CHI PLAY**, Late Breaking Work
2024	Interacting with Computers (Oxford Academic)
2023	IEEE Conference on Games **(CoG)**, Work In Progress

Conference & Workshop Organization

2025-26	Subcommittee Chair Assistant, **CHI**, Subcommittee: Understanding People — Statistical and Quantitative Methods
2025	Program Committee Member, Symposium on Human-Computer Interaction for Work **(CHI Work)**
2024	Local Chair, **FDG**
2023	Workshop Organizer, WPI Women in STEM Conference

University Service

2023-25	Graduate Student Representative, WPI IMGD Graduate Program Committee