

Serena Yang

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Website and Portfolio: www.serenaliyang.com

EDUCATION

Master of Science | Game Science and Design

Expected May 2026 | GPA: 4.00 / 4.00

Northeastern University, Boston, MA

Bachelor of Science | Computer Science & Data Science & Mathematics

May 2024 | GPA: 3.85 / 4.00

Minors: Studio Art, Creative Writing, Digital Media

Marquette University, Milwaukee, WI

RESEARCH INTERESTS

- Development and study of cognitive sandbox games
- Psychological and cognitive implications of game-based systems and play
- Social and cultural impacts of AI and large-scale digitization on future learning
- Applications and development of interactive media (video games, board games, TTRPG, etc.) in cognitive learning, both within and outside of classroom settings
- Games developed for adult education and lifelong learning

SKILLS AND LANGUAGES

- Unity and Unreal – Game Development (2D/3D game development, C# scripting)
- Programmed in a variety of different languages, including but not limited to Java, Python, C, C++, TypeScript, HTML5, R Studio, MATLAB, SQL, JavaScript, and Assembly
- Autodesk Maya – Intermediate proficiency (3D modeling, animation, basic rigging)
- Proficient in most Adobe Creative Suite Software, create various studio artworks, write original music and novels
- Fluent in English and Chinese (spoken, written, and reading), beginner level in Japanese, and Spanish

PUBLICATIONS

“The Mirror Between Us: A Relationship Power Dynamics Sandbox TTRPG”
Society through the Games for Good Conference, March 2026

Accepted by the Journal of Games, Self, and

- Designed an original two-player tabletop RPG exploring power, attachment, and identity in intimate relationships
- Integrates social psychology, attachment theory, and couples therapy research to foster emotional reflection and interpersonal skill-building
- Employs asymmetric information, hidden agendas, and evolving player dynamics to simulate relational tension and negotiation
- Serves both as a reflective tool for adult learners and as an innovative pedagogical model for teaching emotional and relational literacy

“Player Psychology and Decision-Making in Board Game COUP”

Accepted by Analog Game Studies, June 2025

- Analyzed gameplay telemetry data to uncover psychological patterns in bluffing, risk-taking, and uncertainty management
- Identified consistent behavioral biases, including revenge-seeking, underutilization of bluffing, and irrational responses to in-game currency scarcity
- Highlighted cognitive and emotional factors affecting strategic decision-making in social deduction games

“*Interactive Biography: A Visual Novel Approach to Historical Learning in Museum Settings*”

Work in Progress

- For details about the game, please refer to my website

OTHER RESEARCH PAPERS AND PROJECTS

LINEAR REGRESSION, MARQUETTE UNIVERSITY, MILWAUKEE, WI

August 2023- December 2023

INTRODUCTION TO DATA SCIENCE, MARQUETTE UNIVERSITY, MILWAUKEE, WI

August 2022 - December 2022

Making predictions of people’s likelihood to accept video games in school education using statistical models

Self-collected 1700+ data points from both the US and China

Parameters include, but are not limited to, age, gender, whether the participant is a gamer, and his/her digital device used

Methods used, but not limited to, Naïve Bayes, linear regression, logistic regression, and ordinal regression

DIGITAL LITERACIES AND VIDEO GAMES

March 2023 - May 2023

- Final Paper: “Video Games and Interactive Media: The Path to Future Education”
- Discuss the application and benefits of using video games for educational purposes

CREATIVE WRITING PROJECT

January 2021 - March 2021

- Original story with complete Chinese translation: “Princess Peach Blossom”
- Created character portraits and theme music

GAMES (Please see my website for additional details and media)

INDEPENDENT PROJECT 1

Designer and Developer of “*The Mirror Between Us - A Marriage Sandbox TTRPG*”

November 2024 - Present

- Independently created the first cognitive sandbox game designed for cognitive learning for adults
- A tabletop role-playing game exploring power dynamics, attachment, and identity within marriages
- Currently working on the second major iteration while integrating AI digital systems for digital roleplaying

INDEPENDENT PROJECT 2

Designer, Developer, & Artist of “*Hollow Bridge*”

October 2024 - Present

- Educational visual novel designed to foster interpersonal communication and strategic decision-making through branching narratives

- Incorporated dynamic, multi-dimensional character attitude systems to foster analytical thinking about interpersonal complexity (e.g., characters' identity development, familial influences, and individual dispositions)
- Currently in production

NORTHEASTERN UNIVERSITY, Boston, MA, USA

Designer, Developer, and Artist of “*Smile-E-Mart: Cyberpunk Robot Cashier Simulator*”

October 2024 - Present

- Built collaboratively in a four-week sprint for the Game Design and Analysis course
- Explores themes of emotional intelligence and ethical labor through cyberpunk storytelling
- Showcased at Game Developers Conference (GDC) 2025
- Full development of the polished release is currently in progress

TIANJIN HENGDA WENBO TECHNOLOGY Co., LTD, Tianjin, China

June 2023 - Feb 2024

SOUTHWEST ASSOCIATED UNIVERSITY MUSEUM, Kunming, Yunnan, China

May 2023 - Present

Project Director & Main Designer of the “*Life of Dr. Wu Ta-You: A Historical Figure Simulator Game*”

- Pitch the game idea to the museum
- Secure \$28,000 funding with the museum team from Yunnan Normal University
- Design, write, and translate the game's complete design guide and script
- Collaborate with coding, art, and business teams
- Supervise and play test the project, deeply involved in the game's development

“*No Way Out*,” PERSONAL GAME PROJECT

January 2021 - April 2021

Writer and Coder of a text-based interactive novel game demo

- Written over 60,000 words with 1439 links, 750 passages, and 40+ story branches
- A game made with *Twine*, in addition to code written in HTML5, JavaScript, and Python
- Created several character concept arts

AWARDS

GAME DEVELOPERS CONFERENCE (GDC) 2025

Games Narrative Review – Gold Winner, Narrative Summit

Paper: “*Eliza: The Insightful Narrative on AI and the Human-Technology Relationship*”

PROJECT GRANT WINNER

Art + Design Project Grant Winner – Northeastern University

Project: “*Hollow Bridge* – Interactive Visual Novel”

EMPLOYMENT

PLAYABLE THEATRE INTERNATIONAL, nonprofit, Boston, MA

April 2025 - Present

Project Coordinator and Content Manager

- Coordinate programming and logistics for IndieCade 2026 events and symposium
- Edit video materials, manage data, develop websites and promotional content

MU DEPARTMENT OF MATHEMATICAL AND STATISTICAL SCIENCES, Milwaukee, WI

May 2022 - August 2022

Office Assistant

- Managed department documents and assisted with student affairs

TEACHING EXPERIENCES

August 2021 - May 2022

MU THE TUTORING OFFICE, Milwaukee, WI

Student Tutor

- Tutored one year of *Modern Elementary Statistics* (MATH 1700)

MU DEPARTMENT OF MATHEMATICAL AND STATISTICAL SCIENCES, Milwaukee, WI

August 2022 - December 2022

Student Grader

- Graded one semester of *The Nature of Mathematics* (MATH 1300)

RELEVANT COURSEWORK

NU GAME SCIENCE AND DESIGN, Boston, MA

- Games Mixed Method Research, Game Analysis and Design, Data-Driven Player Modeling, 3D Modeling and Asset Creation Principles

MU MULTIPLE DEPARTMENTS, Milwaukee, WI

- Programming Languages, Digital Literacies and Video Games, Social/Collaborative Computing, Linear Regression, Mathematical Foundations of Data Science, Introduction to Data Science

EXTRACURRICULAR ACTIVITIES

- Student Committee Member, NU Game Science and Design Program September 2024 - Present
- Vice President and Event Coordinator of MU Math Club and Pi Mu Epsilon Math Society January 2022 - May 2024
- Online Writer May 2023 - Present
Currently updating a Chinese online novel with 210,000 views (as of September 2023), over 110+ chapters, and 500,000+ words
- Audio Narrator May 2023 - Present
Recorded both the English and Chinese audio guides for SOUTHWESTERN ASSOCIATED UNIVERSITY MUSEUM, Kunming, China
Help with audio editing