

Mica Gardone
Ph.D. Candidate

PROFESSIONAL EXPERIENCE

University of Utah

Salt Lake City, UT, USA

Graduate Research Assistant, Summer 2021 - Current.

Graduate Teaching Assistant, Fall 2020 - Spring 2021.

Sp 2021: CS 3500 - Software Practices II.

Fa 2020: CS 4600 - Introduction to Computer Graphics.

Undergraduate Teaching Assistant, Fall 2019.

Fa 2019: CS 1410 - Object-Oriented Programming.

YouROK

Remote / California

Gameplay Engineer Intern, August 2019 - January 2020.

iD Tech

West Chester, PA, USA

Camp Instructor, June - August 2019.

EDUCATION

University of Utah

Salt Lake City, UT, USA

Ph.D. in Computing, expected graduation 05/27.

Artificial Intelligence Track.

- + Advisor: Dr. Rogelio E. Cardona-Rivera
- + Alchemy - A meta-planner for simulating a person's understanding of a narrative.
- + TITAN - A general-purpose, extensible plan-space planner written in C#.

M.S. in Computing, 2021.

Human-Centered Computing Track, Project Masters.

- + Advisor: Dr. Rogelio E. Cardona-Rivera
- + Expanding DPOCL: Flaws for the Adoption and Rejection of Orphan Actions in Decompositions

B.S. (Honors) in Computer Science, 2016.

Entertainment Arts & Engineering Emphasis.

RESEARCH INTERESTS

Computational psychology, human-centered artificial intelligence (HCAI), artificial intelligence (AI), games AI, computational models of narrative, game design, co-creative agents, procedural content generation, player modeling, planning, narrative planning, machine learning (ML), human-in-the-loop machine learning, explainable AI (XAI), deep learning, long-term autonomy.

PEER REVIEWED PUBLICATIONS

♦ denotes equal contribution.

STRONGLY PEER REVIEWED

J. M. Nelson, **M. Gardone**, P. Sauma-Chacón, and R. E. Cardona-Rivera, “Accounting for Incomplete and Partially-ordered Observations within Classical Model-based Plan Recognition for Sensemaking of Information Storygames,” 2025. **(24.3% Acceptance Rate)**

A Case-Based Reasoning Approach to Plugin Parameter Selection in Vocal Audio Production. Michael Clemens, Rushit Sanghrajka, Monthir Ali, **M. Gardone**, Shilpa Thomas, Hunter Finney, Rogelio E Cardona-Rivera. International Conference on Case-Based Reasoning, 350-364. 2022. Springer International Publishing Cham. **(38% Acceptance Rate)**

REFEREED WORKSHOP ARTICLES

Toward Planning with Hierarchical Decompositions and Time-frames. **Mica Gardone** and Rogelio E Cardona-Rivera. Proceedings of the 7th Workshop on Hierarchical Planning at the 34th International Conference on Automated Planning and Scheduling. 2024.

Re-examining the Planning Basis of Goal-driven Autonomy Problems. Rogelio E Cardona-Rivera, **M. Gardone**, Logan Peterson, Laura M Hiatt, Mark Roberts. Proceedings of the Workshop on Integrated Action and Execution at the 32nd International Conference on Automated Planning and Scheduling. 2022.

ADDITIONAL ARTICLES

Gardone, M. (2025). Towards a Process of Simulating Narrative Comprehension. In *Proceedings of the 21st AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*.

Nancy N. Blackburn ♦, **M. Gardone** ♦, and Daniel S. Brown. 2023. Player-Centric Procedural Content Generation: Enhancing Runtime Customization by Integrating Real-Time Player Feedback. In *Companion Proceedings of the Annual Symposium on Computer-Human Interaction in Play (CHI PLAY Companion '23)*, October 10--13, 2023, Stratford, ON, Canada. ACM, New York, NY, USA 7 Pages. <https://doi.org/10.1145/3573382.3616069>.

INVITED TALKS/GUEST LECTURES

Guest lecture in EAE 6330 - Game Engineering III on April 3rd, 2024 at the University of Utah. Topic(s): Machine Learning in Games, Procedural Content Curation, and Player-Centric PCG.

Guest lecture in EAE 6910 - Game AI on January 24th, 2024 at the University of Utah. Topic(s): Agent Movement / Dynamic Wander, Align, and Face.

ARTEFACTS

SOFTWARE

Player-Centric Procedural Content Generator (PCPCG).

- + Github: <https://github.com/MichaelGardone/PCPCG>
- + Online human-in-the-loop procedural content parameter discovery agent for users.
- + Published with *Player-Centric Procedural Content Generation: Enhancing Runtime Customization by Integrating Real-Time Player Feedback*.

GAMES

BRAINWORM (2025). Hangover Sunshine. For Brackey's Game Jam 2025.1 ("NOTHING CAN GO WRONG") and Godot Wild Jam #78 ("ERASE").

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/brainworm>
- + Brackey's Game Jam: Ranked 54 out of 2,183 (Top 2%).
- + Godot Wild Jam: Ranked 11 out of 136 (Top 10%).

FRANKEN JUDGE (2024). Hangover Sunshine. For GMTK 2024 Game Jam - "BUILT TO SCALE."

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/franken-judge>
- + Ranked 326 out of 7,626 (Top 5%).

KALEIDOKILL (2024). Hangover Sunshine. For Pirate Software Jam 15 - "ALCHEMY & SHADOW."

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/kaleidokill>

DEFCON JUNIOR (2024). Hangover Sunshine. For Godot Wild Jam #69 - "VOID."

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/defcon-junior>
- + Ranked 2nd out of 189 entries.

KATAMARI MEATBALL (2024). Hangover Sunshine. For Godot Wild Jam #68 - "FORGE."

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/katamari-meatball>
- + Ranked 51st out of 155 entries.

HEAD HONCHO (2024). Hangover Sunshine. For Godot Wild Jam #65 - "OVERLOAD."

- + Role: Engineering, Design, Audio
- + Itch: <https://hangoversunshine.itch.io/head-honcho>
- + Ranked 36th out of 159 entries.

KaRu (2022). Mirror Studio. Published through Steam.

- + Role: Writer
- + Credited as Michael Gardone
- + Steam: <https://store.steampowered.com/app/1834000/KaRu/>

Ballad of the Masked Bandits (2020). Big Boot Stoodts, LLC.

- + Role: Lead Engineer
- + Credited as Michael Gardone
- + Steam: https://store.steampowered.com/app/1280070/Ballad_of_The_Masked_Bandits/

Harass (2019). Team Hangover Sunshine.

- + Role: Designer, engineer
- + Credited as Michael Gardone
- + Itch: <https://hangoversunshine.itch.io/harass> (Password: 4467)
- + Voted “Most Interesting Game” of the Spring 2019 Alternative Game Development Cohort.

SERVICE TO PROFESSION

Program Committee Member

2026 American Association for Artificial Intelligence (AAAI) Main Track

2024 Artificial Intelligence and Interactive Digital Entertainment (AIIDE) Main Track

2023 Artificial Intelligence and Interactive Digital Entertainment (AIIDE) Research Track

Artifact Reviewer

2023 Artificial Intelligence and Interactive Digital Entertainment (AIIDE)

OTHER PROFESSIONAL EXPERIENCE

Evolve IP

King of Prussia, PA, USA

Software Engineer Intern, May - August 2017.