

Tyler Machanic

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Summary:

Versatile software engineer and game developer. Led a multidisciplinary team at MAGIC Spell Studios, building complex gameplay systems and polished features in Unity. Highly proficient in object-oriented programming, agile development, Unity, AI-assisted tools, version control, debugging, teamwork, and rapid prototyping. Clear, effective communicator with experience tutoring and leading development teams.

Education:

Rochester Institute of Technology (RIT) – B.S. in Game Design and Development | Rochester, NY

Graduated December 2024 | Magna Cum Laude | GPA: 3.8 | Dean's List since Fall 2020

Relevant Coursework: Computer Science (Python, Java), Game Design & Development (C#, Unity), Data Structures & Algorithms (C++), AI for Game Environments (C#, Unity)

Work Experience:

Project Lead – MAGIC Spell Studios, August 2024 – December 2024 | Rochester, NY

- Led a 9-person cross-functional team in developing Heisteria, a couch co-op party game, ensuring team alignment and on-time delivery
- Programmed all aspects of the game including core gameplay systems, state machine-driven enemies, controller support for 2–4 players, and an advanced animation controller, using Unity/C#
- Managed Agile development cycles by creating weekly sprint reports and presenting project updates to stakeholders, resulting in consistent feedback and successful project milestones

Founder & Programming Tutor – Private Tutoring Business, September 2022 – Present | Remote

- Founded a remote tutoring business teaching computer science fundamentals and game development to elementary through high school students
- Designed personalized lesson plans and hands-on programming projects using Python, C#, and Unity, tailored to each student's learning needs
- Guided students through game development projects such as a Pokémon battle simulator and a bow-and-arrow combat game, building practical coding skills and confidence

Programming Counselor – TIC Summer Camp, June 2022 – August 2022 | Washington, D.C.

- Taught programming to kids aged 6–15 using Scratch, Java/Processing, Python, and Unity/C#
- Facilitated collaborative game development projects, promoting creativity, problem-solving, and teamwork
- Helped students build and demo functional games, sparking long-term interest in game design and coding

Programming Projects:

Heisteria – Concept Creator & Lead Developer (2024–Present)

Developed a couch co-op heist party game in Unity/C#; led design and programming for core gameplay systems.

Originated as a class project and expanded into a full-time internship at MAGIC Spell Studios.

Pirate's Quest – Concept Creator & Lead Developer (Spring 2023)

Created a pirate-themed roguelite in Unity/C#; programmed a grid-based tactics combat system entirely from scratch.

The Twisting Labyrinth – Concept Creator & Lead Developer (Spring 2022)

Built a dungeon exploration RPG featuring procedural maze generation using Unity's tilemap system and custom file-based input.

Dungeon Heroes – Solo Developer (Fall 2020)

Designed and programmed an endless dungeon crawler in Unity/C# with 8v8 turn-based combat, status effects, and a dynamic progression system.

Skills:

Programming Languages: C#, Python, C++, C, Java, TypeScript, HTML, CSS, JavaScript

Software and Technical Knowledge: Unity, Visual Studio, VS Code, Git, GitHub, Trello, Maya, Agile Development, Version Control, Optimization, Debugging, API Integration, JSON, AJAX, XML, Databases

Soft Skills: Problem Solving, Attention to Detail, Creativity, Team Leadership, Collaboration, Communication