

Sebastian Bolatto

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Education

Rochester Institute of Technology, Rochester, NY
M.S. Game Design and Development

Graduated May 2026
GPA: 4.00

University of Maryland, College Park, MD
B.S. Computer Science

Graduated May 2024
GPA: 3.88

Awards

Academy of Interactive Arts and Sciences DICE Awards Scholarship
National GEM Consortium GEM Fellowship

Awarded August 2025
Awarded April 2024

Tools and Skills

Game Engines and 3D Modeling: Unity, Unreal, Blender, Autodesk Maya

Programming and Source Control: C#, C++, C, Java, Python, Ruby, OCaml, Git, Github, GitLab

Software Engineering: Debugging, Data Structures & Algorithms, Tool Development, UI, Networking

Development Practices: Agile Development, Code Reviews, Rapid Prototyping, Interdisciplinary Collaboration

Leadership: President of the UMD Game Developers Club and organizer for the Student Game Developers Alliance

Languages: Fluent in English and Spanish

Work Experience

AR/VR Intern – National Aeronautics and Space Administration (NASA)

June 2023 – December 2023

- Collaborated with scientists to gather requirements, translate their needs into software features, and implement tools which would allow them to view and form connections between data sets in a Mixed Reality project built using C# and Unity.
- Developed UI for a Mixed Reality climate visualization system, allowing users to select which weather datasets to display on a holographic Earth, adjust layer opacity and render order, and compare datasets through mathematical operations.
- Contributed to a lunar simulation built in Unity to support Artemis mission planning. Made multiple improvements and bug fixes to the project, including fixes to lighting, shadows, import settings, and standalone build issues.
- Implemented a physics-based rover locomotion and control system as well as an input manager system allowing user interaction scripts to be easily programmed for both PC and Virtual Reality controls.

Simulation Development Intern – Consolidated Nuclear Security, LLC

Summer 2024, Summer 2025

- Utilized Unreal Engine and C++ to develop a Virtual Reality training simulation, integrating custom thermal haptic gloves to create heat in the user's hands when holding radioactive materials close together to teach signs of nuclear criticality.
- Implemented user hand-tracking for Virtual Reality using C# and Unity, allowing users to explore a virtual nuclear power plant by bringing up a menu through clapping their hands and tapping on navigational buttons with their fingers.
- Built an Augmented Reality app using Unity for a statue installation of historical figures in A.K. Bissel Park which interpreted spoken user questions and selected a relevant response which would answer the question in detail.
- Created a tool using Python and Unity that converts LiDAR scans of building interiors into seamless 3D meshes that accurately retain the dimensions of the real location by cleaning the point cloud, performing a Poisson surface reconstruction, UV mapping, and transferring vertex colors from the point cloud into the mesh texture.

Selected Game Project

Cursebreakers – Engineer and Designer – Unity Engine – Team of 5

August 2025 – Present

- Designed and developed core systems for a multiplayer videogame featuring 1v3 combat and asymmetrical roles.
- Developed the procedural generation of a three-story mansion, using a modified wave-function collapse algorithm. Added tools for adding constraints to rooms to ensure they spawn a set distance away from other room types or on certain floors.
- Communicated with a five-person interdisciplinary team to coordinate development tasks and priorities. Maintained detailed technical documentation for all gameplay systems, architecture, and custom development tools.
- Rapidly prototyped and iterated on game systems in short cycles, using structured user testing to gather user feedback and refine clarity, pacing, feel, and user experience based on testing insights.
- Achieved **Finalist in Technical Excellence** at RPI Gamefest 2026.