

Katelyn Victoria LoPorto

Los Angeles, CA • (313) 909-1273 • loporto.kat@gmail.com • <https://loportol.github.io/>

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, CA August 2025 - May 2027

Master of Science, Major in Computer Science (Game Development)

Courses: 3D Graphics and Rendering, Game Design Workshop, Game Engine Architecture

UNIVERSITY OF MICHIGAN, Ann Arbor, MI August 2019 - December 2023

Bachelor of Science in Engineering, Major in Computer Science, Minor in Music

Courses: Intro to Game Development, Extended Reality and Society, Artificial Intelligence, UI Development

WORK EXPERIENCE

PROGRAMMING LEAD August 2023 - April 2024

Soul of the Forest, Wolverinesoft Studio, Ann Arbor, MI

- Led team of 15 programmers to build scalable gameplay systems for a turn-based Unity RPG
- Directed system architecture with focus on performance, real-time responsiveness and player immersion
- Conducted code reviews and mentored developers on clean architecture, debugging, and rapid iteration

PROGRAMMING PROJECTS

AUDIO-DRIVEN PROCEDURAL WORLD GENERATION November 2025 - December 2025

C++, Unity Engine, Github

- Developed a real-time audio-reactive environment system converting WAV input into dynamic terrain using DCT-II signal processing
- Created synchronized audiovisual experience by mapping frequency windows to mesh vertex height updates
- Implemented custom toon shader to highlight land mass deformation and regional heights

UNTITLED FOOD GAME - UNREAL ENGINE 5 MULTIPLAYER SHOOTER August 2025 - Present

Unreal Engine 5 (Blueprinting & C++), Networking (Replication), Niagara, Perforce, Notion

- Developed dynamic shooter, focusing on networking, gameplay, and round management features
- Implemented custom bullet behavior and impact effects with Blueprints, C++ integration, and Niagara
- Rapidly prototypes and iterated on gameplay systems in a production-style pipeline

SPEAKVR - UNREAL ENGINE 5 VR PUBLIC SPEAKING SIMULATOR November 2023 - December 2023

Unreal Engine 5 (Blueprinting & C++), GitLab, Atlassian Suite

- Designed immersive VR environment focused on emotional and sensory feedback
- Built interactive audience AI to deliver real-time audio-driven responses
- Implemented spatial audio to enhance realism and presence

SKILLS

- **Game Development:** Unreal Engine 5, Unity, XR Development
- **Technical Art:** Shaders, Procedural Generation
- **Programming Languages:** C/C++, C#, Python, JavaScript, HTML/CSS
- **Audio:** Wwise, FMOD, Ableton Live 12, Audacity
- **Tools:** Perforce, Git (Github), Jira, Confluence

ORGANIZATIONS

MICHIGAN MARCHING BAND, University of Michigan, Ann Arbor, MI August 2019 - April 2023

- Performed in a 350+ member ensemble, developing strong timing, collaboration, and performance awareness
- Gained experience in large-scale audience engagement and synchronized performance