STEVEN LILLEY

CONTACT

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TECHNICAL EXPERIENCE

Programming Languages
- C#
- JavaScript
- Python
- C++

Game Engine
- Unity Game Engine

Plugins/Packages
- Cinemachine
- I2 Loc
- Topdown Engine
- Vuforia

Software
- Visual Studio
- Microsoft Office Suite
- Maya
- AutoCAD
- Houdini
- SourceTree
- Git
- Gitlab
- JIRA
- Aseprite

PROFESSIONAL EXPERIENCE

Game Engineer, Filament Games, LLC
Sep 2021 – Jan 2026
- Game programming and development for different types of games for various clients.
- Work closely with small teams of designers, UIUX developers, and artists, as well as directly with the clients, to bring their projects together.
- Sole programmer projects, implementing gameplay features and core system architecture, documenting key algorithms and interfaces, troubleshooting deployment issues, and communicating with team daily.
- Work in A-Z game development process - from concept through design, development, and delivery.

Project Engineer, Booth & Associates, LLC
Aug 2015 - July 2017
- Worked with a team to engineer structures and layouts for power utilities.
- Designed reusable tools in AutoCAD to improve team productivity.
- Led AutoCAD drafters to teach them how to use tools I created.

AutoCAD Drafting Engineer, Uptegraff Manufacturing
Jan 2015 - July 2015
- Worked with a team to design specialized transformers.

SHIPPED GAMES

Game Engineer, *Serein* Game
Sep 2021 – Sep 2022
- Created gameplay systems to tie into engineering lead's systems, such as the spawning, minigame, and interaction systems.
- Built Unity Editor tools to aid designer in level construction.
- Used high level scene system for minigame integrations.
- Built a 3D point and click player controller integrating a dynamic Unity NavMesh, animation systems, and interaction systems.

Lead Game Engineer, *Unannounced 3D* Game
Sep 2022 – Nov 2023
- Used an event-based architecture to update game state to drive the ecosystem simulation where creatures communicated with each other and the world.
- Created 3D player controller with swimming supported by TopDown Engine Unity package.
- Event focused structure supported highly iterative process with the client, and required extensive documentation.
- Used a cubic hex coordinate system to build a 2D hexagon tile puzzle game, and supported this with a tool to design new puzzle pieces.
- Created an accessible system of Scriptable Objects to drive data of many game systems to aid designers.
- Designed flexible components for artists to drive Animators and Shaders with dynamic environmental values.

Lead Game Engineer, *Brief the Chief iCivics* Game
Nov 2023 – May 2024
- Extracted a branching dialogue system from an old game and updated and integrated it for this game.
- Worked extensively with the UIUX developer lead, including designing the game object architecture of the UI prefabs in parallel with the engineering systems to build a cohesive system to move between all screens in the game.
- Created a memento-like system to initialize many data objects based on Google sheets, but be able to add dynamic data to individual instances for player game state tracking.

Lead Game Engineer, *Investigation Declaration iCivics* Game
Jul 2024 – May 2025
- Created data system to support tracking player data and saving that data from one session to the next.
- Created an object container that could nicely format paragraphs of text while fitting UI elements throughout for the Madlib-type documents in the game.
- Created a robust progression system that could easily be modified at the designer's request, controlling which areas and times were unlocked and how.

Lead Game Engineer, *PBSNC Read-a-roo Early Literacy* Game
Apr 2025 – Sep 2025
- Reworked an old audio system, with significant focus on reworking the VO system to help with timing elements.
- Created progression system for each area to track which words had been successfully triggered and randomly select prompts to advance player through all the objects in each area.
- Built game elements and worked with a senior engineer supporting use of a third-party plugin, Keen, which included html coding and connecting Unity logic to web plugins.

DESIGN PROJECTS

Research Assistant and System Developer, Architecture AI Pathing Tool
Mar 2020 – Mar 2021
- Designed and programmed an A* pathing AI system in Unity to visualize people pathing through a space with architectural rules.
- Created data logging system to visualize any agent's path at any time.
- Implemented file reader to add data to system from outside software.

Research Assistant and Game Developer, Scuttlebuddy Game
Aug 2018 – Aug 2019
- Built a mixed reality 3D game experience with a team to fit on board the Cruiser Olympia at the Independence Seaport Museum.
- Developed this mixed reality project in Unity for use on HoloLens devices.
- Built the entirety of the switch board puzzle game within the experience.

EDUCATION

Drexel University, M.S. Digital Media
Aug 2017 – Mar 2020, GPA: 3.83/4.00

Pennsylvania State University, B.S. Mechanical Engineering
Aug 2010 – May 2014, GPA: 3.45/4.00