

STEVEN LILLEY

CONTACT

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Github:

<https://github.com/lilleypad13>

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TECHNICAL EXPERIENCE

Programming Languages

- C#
- JavaScript
- Python
- HLSL

Software

- Unity Game Engine
- Visual Studio
- Adobe Photoshop
- Adobe Illustrator
- Microsoft Office Suite
- Maya
- Unreal Game Engine
- AutoCAD
- Houdini
- SourceTree

Technical Skills

- HTML/CSS
- Git

EDUCATION

Drexel University, M.S. Digital Media

Aug 2017 – Present, GPA: 3.83/4.00

Pennsylvania State University, B.S. Mechanical Engineering

Aug 2010 – May 2014, GPA: 3.45/4.00

DESIGN PROJECTS

Research Assistant and System Developer, Architecture AI Pathing Tool

Mar 2020 - Present

- Designing and programming 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.

Graduate Student, Drexel Thesis – Physics Puzzle Level Generator

Jan 2019 – Present

- Researching game-based learning and procedural level generation in games to develop a system to induce physics learning in students.
- Developing a system within Unity using Human: Fall Flat Workshop to procedurally generate physics puzzles.
- Programming an AI system to generate consistently solvable puzzles.

Research Assistant and Game Developer, Scuttlebuddy Game

Aug 2018 – Aug 2019

- Built a mixed reality 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.
- Debugged player interaction interface.

Game Developer and Designer, Coral Invasion Game

Nov 2017 – Mar 2018.

- Designed and programmed the projectile, player controller, game manager, and enemy AI as the only programmer for this action strategy game in Unity.
- Designed gameplay loop and level layouts with player feedback.

PROFESSIONAL EXPERIENCE

Project Engineer I, Booth & Associates, LLC

Aug 2015 - July 2017

- Worked with a team to engineer structures and plan layouts for power utility companies.
- 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.