

## EXPERIENCE

**Eclipse Gaming Systems** *Duluth, GA*  
**Senior Software Engineer** *November 2021 - Present*  
**Core Software Engineer** *January 2020 - November 2021*

Learned both the Fusion system and its replacement, Photon. Became the unofficial ENGR team lead during layoffs and furloughs. Educated other engineers to become stronger themselves by developing documentation about systems, specific tools, and best practices. Joined the framework team and created a new project builder tool, diagnosed and fixed witness builder issues, and implemented a new video/screenshot capture tool and other auto-casino testing tools. Implement games in Unity from start to finish, including one which became the template for all new games. Design and realize new features, including complicated bonus-in-bonus interactions and recovery cases. Diagnose and solve dozens of field issues within the day I am made aware of them. Work closely with technical artists to quickly implement prototypes and adapt to change requests from designers or management. Manage multiple projects simultaneously and worked directly on 24 of the last 36 released games, including 5 shortlisted for various Global Gaming Awards.

**Analytical Graphics, Inc.** *Philadelphia, PA*  
**Junior Programmer/Developer** *April - September 2017*

Learned the STK engine for simulating and analyzing land, air, and space-based operations. Implemented brightness, contrast, and gamma correction post-process filters. Created new classes to render 3D vectors and axes with dynamic scaling and fully-customizable properties. Refactored/removed ten thousand lines of legacy code. Wrote GLSL shader code and C++ on the Graphics team.

**Bentley Systems Inc.** *Philadelphia, PA*  
**Software Engineering Co-op** *March - September 2016*

Converted software builds to use new code coverage tool, then wrote and ran unit tests to increase coverage. Updated documentation to be built to a set of linked html pages. Wrote code maintenance utility to determine an app's lowest necessary dependencies and update accordingly. Converted old app into a template and overhauled the UI layout and its backend messaging system. Authored and ran usability labs. Communicated daily with international colleagues. Fixed bugs and wrote code in C#, XML, SQL, and command line as necessary.

**Skyles Game Studios** *Philadelphia, PA*  
**Video Game Tester** *March - September 2015*

Learned the Unity Engine, including specific advanced components as needed. Updated games to be compatible with newer versions of Unity. Compiled and thoroughly tested game builds for PC, web, and mobile platforms. Documented bugs and implemented fixes. Overhauled user interface and in-game store components for increased compatibility.

**Pannier Corporation** *Glenshaw, PA*  
**Software Intern** *July - September, 2013 & 2014*

Authored and updated manuals including screenshots and operation instructions for metal tag printers. Designed, implemented, and debugged Visual Basic applications for testing the timing of I/O signals. Created Quick Start guides for marking systems including photography and layout in Photoshop. Wrote ladder logic in Rockwell Automation RS Logix 5000.

**ZWOLYA GAMES** *Pittsburgh, PA - Duluth GA*  
**Founder and Sole Proprietor** *September 2018 - present*

Independently code, create all art assets for, playtest, and market games. Released *Alien Cow Farm* on Steam 6/1/19. Released *Undersea Odyssey* on the Google Play Store 10/1/19. Wrote postmortems for collaborative projects launched to itch, Newgrounds, and Simmer.

## EDUCATION

College of Computing and Informatics, Drexel University  
Pennoni Honors College, Drexel University, 2013-2018

*Bachelor of Science in Computer Science,*  
*Summa Cum Laude, Dean's List, Cumulative 4.0 GPA*  
*Game Programming and Development Concentration*  
*1.5 years cumulative industry experience from co-op jobs*

**Senior Design:**  
**Team Lead and System Design Lead**

Organized and ran team meetings. Delegated weekly work and compiled scrum reports. Interfaced with partner GMAP team. Authored and maintained the SDD and other submission documents. Designed and kept a working knowledge of a 2500-line codebase. Successfully pivoted the game after change requests very late in development. Nominated for CCI Final Four competition and won third place.

**Game Development Workshop:**  
**Co-Producer**

Delegated all coding tasks. Designed an in-game Build System with interchangeable, modular components. Implemented controller support. Maintained the GDD, compiled weekly scrum reports, and managed all submissions. Created and gave sell presentations for potential investors. Successfully oversaw a team merge and game switch for the second term.

## SKILLS

**Software Proficiency:**

Unity; Adobe Photoshop; Git; Ren'Py; Microsoft Office

**Coding Languages:**

C#; Python; Java; C++; MATLAB; JavaScript and HTML

**Other:**

Public speaking, Fourth Degree Black Belt (Master Level) and International Tang Soo Do Federation Lifetime Member, Juggling