

EXPERIENCE

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

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

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

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.

Drexel University College of Engineering *April 2015 - May 2018*
Lead ELC and ACE Tutor *Philadelphia, PA*

Answered specific questions and taught students physics, math, and MATLAB. Managed individual appointments, including many on short notice. Prepared and lead group review sessions for exams.

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

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.

The Dark Magicians *April 2017 - June 2018*
Senior Design Team Lead and System Design Lead *Philadelphia, PA*

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.

SID Games / Off Brand Hell Games *September 2017 - March 2018*
Game Development Workshop Co-Producer *Philadelphia, PA*

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.

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

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

Bachelor of Science in Computer Science,
Summa Cum Laude, 2018
Game Programming and Development Concentration
1.5 years cumulative industry experience from co-op jobs

Relevant Coursework:

Senior Design I, II, III
Game Development Workshop I, II
Serious Game Development
Experimental Game Development
Computer Game Design and Development
Computer Graphics Imagery and Animation
Interactive Computer Graphics
Human-Computer Interaction, Graphical User Interfaces
Software Design, Software Engineering
Data Structures
Advanced Programming Tools and Techniques
Web and Mobile App Development

SKILLS

Software Proficiency:

Unity; Adobe Photoshop; Maya; Blender; Eclipse;
AVS Ringtone Maker; VSDC Video Editor; Visual Studio;
Microsoft Office

Coding Languages:

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

HONORS AND AWARDS

High-Performance Computing Award and honored onstage at graduation for cumulative 4.0 GPA, Drexel University, 2018

Third place team in Senior Design Final Four competition, Drexel University College of Computing and Informatics, 2018

Dean's List, Drexel University, 2013 - 2018

Upsilon Pi Epsilon, International Honor Society for Computing and Information Disciplines, 2016 - present

AJ Drexel Scholarship, Drexel University, 2013 - 2018

Valedictorian, Serra Catholic High School, 2013

Fourth Degree Black Belt (Master Level) Promotion, International Tang Soo Do Federation, 2014