Liam	James
Middlebrook	

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# Skills

Programming Languages	Libraries and Frameworks	Development Tools
C# (6 yrs.) C++ (1 yr.) GLSL (Familiar) Python (Familiar)	.NET (4.0 - 4.5) XNA (4.0 - 4.0 Refresh) Modern OpenGL (3.3+)	Visual Studio (2010 - 2015) Unity 3D 4.x Git

## Selected Projects Splattershmup - Lead Effects Programmer

Splattershmup is a Shoot 'Em Up game built in Unity3D. In Splattershmup the player leaves a trail of paint as they play resulting in images that resemble Jackson Pollock's paintings. I designed and implemented the paint system.

## OfCourse - Contributor

OfCourse is a course website framework that was written in Python using the Flask library. OfCourse is currently being used in RIT's Humanitarian Free and Open Source Software Culture Course. Of Course is part of the FOSS@RIT program which is sponsored by RedHat.

https://github.com/ryansb/ofcourse.

## MINX - Lead Developer

MINX is a C++ Game Development Framework. MINX makes it easier to create 2D games in C++ using an API that is similar to Microsoft's XNA Framework. MINX currently runs on Windows and Linux. I created the graphical backend for MINX and designed the API endpoints.

https://github.com/GearChicken/MINX

### OpenGL Water Demo - Creator

A demo written in C++ and OpenGL that renders water. The waves are based off of scrolling displacement map textures. The demo includes a photo of pebbles with refraction to better demonstrate the effect of the waves. The water in this demo is looks best when used as a background detail or with a minimal wave amplitude.

https://github.com/liam-middlebrook/opengl-water

# Russian Chicken Inspector - Creator

Russian Chicken Inspector is a game created during Global Game Jam 2014. In Russian Chicken Inspector you go around the world with the goal of collecting as many eggs as possible. All of the textures used in Russian Chicken Inspector are procedurally generated on runtime.

https://github.com/liam-middlebrook/Russian-Chicken-Inspector

# Work Experience MAGIC Research Fellow

March 2014 - Present

Worked on BlockyTalky. I implemented the Servo Motor Block and assisted in implementing an interface for remotely controlling the BlockyTalky through a webapp.

## Kids On Campus Instructor

July 2014 - August 2014

Worked with students from grades 9 - 12. Over the course of two weeks each session of campers learned how to use the Unity3D engine. The campers were taught how to create scripts for Unity in C#.

## Kids On Campus Assistant Instructor

July 2012 - August 2013

Assisted in teaching students from grades 9 - 12 how to create games. They used Microsoft's XNA Framework in C# and learned about different Object Oriented Programming Concepts.

#### Education

Rochester Institute of Technology

August 2013 - Present

Game Design and Development

3.7 GPA