Liam	James
Midd	lebrook

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# Skills

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

## 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. I worked on the Participants page for OfCourse which scrapes students blogs for posts. OfCourse is part of the FOSS@RIT program which is sponsored by RedHat.

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

### **MINX**

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

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

# 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

B.S. Game Design and Development

3.7 GPA

### Activities

Election Night Hackathon 2014, FOSS@MAGIC, Global Game Jam 2014, Homestretch Hackathon 2014 - 2015, Local Hack Day 2014, National Civic Day of Hacking 2014, Software Freedom Day 2014