

**Liam James Middlebrook**      liammiddlebrook@gmail.com  
github: liam-middlebrook

---

Skills	Programming Languages	Libraries and Frameworks	Development Tools
	C# (7 yrs.) C++ (2 yrs.) GLSL (Familiar) Python (Familiar)	.NET (4.0 - 4.5) XNA (4.0 - 4.0 Refresh) Modern OpenGL (3.3+) Flask	Visual Studio (2010 - 2015) Unity 3D 4.x Git 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@MAGIC 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 implmented 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 2013 - 2014, Imagine Cup Hackathon 2013 - 2014, Local Hack Day 2014, National Civic Day of Hacking 2014, Software Freedom Day 2014