

*Margaret E. Dorsey*

Margaret E. Dorsey  
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## EDUCATION

Rochester Institute of Technology, Honors Program  
Game Design and Development, BS  
Computational Mathematics, BS  
Computer Science, Minor  
GPA: 4.0  
Expected Graduation: May 2018

## SKILLS

### PROGRAMMING

C	Monogame/XNA
C++	Unity 5.0
C#	OpenGL
HTML	Git
CSS	

### MATHEMATICS

Multivariable and Vector Calculus	Wolfram Mathematica
Linear Algebra	Maple 2015
Differential Equations	LaTeX
Discrete Mathematics	
Real Analysis	

## EXPERIENCE AND RESEARCH

### LIE SYMMETRIES AND THEIR APPLICATIONS TO DIFFERENTIAL EQUATIONS

Summer 2015/Fall 2015, under Dr. Tamas Wiandt

Researched the theoretical foundations of symmetry methods for differential equations, including Lie Symmetry Groups of ODEs, PDEs, and systemes, infinitesimal generators and their prolongations, and discrete symmetries. Applied these methods to various applicational problems.

### CRASHTEST GAMES

Fall 2015 - Present

Part of the administration of Crashtest Games, a club dedicated to peer testing and critique of student games, and analysis of published games. Also involved in the design and moderation of several faculty-developed "Megagames", which are large scale hybrids of war games and live action role playing.

### ARBITER

Spring 2015

Led a team of 4 in the design and development of a turn based strategy game using Monogame.

Was responsible for File IO, map and unit implementation, gameplay algorithms, and procedural map generation.

Reworked during Summer 2015 and created an AI player using a weighted graph.