DOMINIC ZIRBEL
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SKILLS

Full-Stack Web Development	HTML (Jade), CSS (Compass, LESS), jQuery
	node.js, PHP (Yii/Yii2, Zend)
	SQL (MySQL), NoSQL (MongoDB)
	Interest and real-world experience in Interface Design
General Programming	C/C++, Python, Java - solid foundation in the feel, style, and uses of these and similar languages
	Linux - day-to-day use and comfort with top-level components (command line, scripting)
	Git - extensive use for many years
	Native Android Development - practical experience
Mathematics	Strong core, particularly in Graph Theory, Combinatorics, Linear Algebra, and Analysis
	Analytical thinking and problem solving
	◻ Putnam Exam Scores: 2013 - 10 (~65th percentile), 2015 - TBA

EXPERIENCE

◼ **MetabolismFun** *Full-Stack Web Engineering* July 2013 - Jan 2015	An online, turn-based educational game forcing the player to learn metabolic pathways in an engaging, interactive way to maximize their score. Features customizable settings, saved games, and a flat, smooth appearance.
	Worked with Dr. Neocles Leontis at BGSU to develop the website to teach cellular metabolism in his classes and beyond. I was responsible for programming, design, and deployment.
◼ **Agile Oasis Technologies** *Intern; Web Development* Summer 2013, 2015	Summer 2015: Developed social network site Project Qi. In addition to standard features (profile, friends, groups, pictures, status feed, etc.) the site aimed to connect users to non-profit organizations depending on the activity of their followers. I did backend programming in Yii2, frontend with Compass, Bootstrap, and jQuery, and worked closely with the client to create the experience he had in mind.
	Summer 2013: Worked on a variety of projects, generally designing and building the frontend for contracted websites.
◼ **Personal Robotics** *Intern; Android Development* Summer 2012	Designed an Android application for in-house use on a humanoid robot that simplified normally difficult tasks such as adjusting motor position, displaying sensor output, or sending a direct command.
◼ **Game of Life** *Independent Project* 2009 - 2013	A simulation of Conway's Game of Life developed in Java, with emphasis on a smooth and intuitive interface.
	A tool as much as a game, the program allows users to work on an infinite grid, place predefined patterns, and watch cells evolve, with a powerful engine for fast simulation.

EDUCATION

◼ **Carnegie Mellon University** *Math Undergraduate* 2013 - Current	Sophomore in the Mellon College of Science, majoring in Mathematics with a minor or double major in Computer Science
	Cumulative GPA (as of Jan 2016): 3.0
◼ **Bowling Green State University** *Supplementary Classes* 2009 - 2013	Math and Computer Science classes taken during high school, including senior-level Probability/Statistics and master's level Analysis
	Cumulative GPA: 4.0
◼ **Saint John's Jesuit** *High School* 2009 - 2013	Graduated in 2013 as Valedictorian
	Cumulative GPA: 4.8 on a 4-point scale