

## Skills

### Full-stack Web Engineering

- HTML, CSS (Compass, LESS), jQuery
- node.js, PHP (Yii, Zend)
- SQL (MySQL), NoSQL (MongoDB)
- Design

### Native Android Development

### Assorted Programming

- C/C++, Python - solid foundation in the feel, style, and uses of these and other languages
- Linux - day-to-day use and comfort with top-level components (command line, scripting)
- Git - extensive use for many years

### Mathematics

- 2013  Putnam Score: 10

## Experience

### MetabolismFun - Full-stack Web Engineering

- An online, educational game created to teach cellular metabolism at a university level.
- Worked with Dr. Neocles Leontis at BGSU to develop the game for his class; I was responsible for programming, design, and deployment.
- Features a playable turn-based game forcing the player to learn metabolic pathways to maximize certain outputs, customizable settings, saved games, and a flat, smooth appearance.

### Personal Robotics - Intern; Android Development

- 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.

### Agile Oasis Technologies - Intern; General Web Development

- Worked on a variety of projects, generally designing and building the frontend for contracted websites.

### Game of Life - Independent Project

- A simulation of Conway's Game of Life, developed in Java to run on a desktop computer.
- A game as much as a tool, the program allows users to work on an infinite grid, place predefined patterns, and watch cells evolve over time.

## Education

### Carnegie Mellon University

- Sophomore in the Mellon College of Science, majoring in Mathematics with a minor or possible double major in Computer Science.

### Bowling Green State University

- I took many mathematics classes during high school at BGSU.
- Cumulative GPA: 4.0

### Saint Johns Jesuit High School

- Graduated in 2013 as Valedictorian with a cumulative GPA of 4.8.

## Dominic Zirbel

dominiczirbel@gmail

412 204 7462

