## **Skills**

## Full-stack Web Engineering

- HTML, CSS (Compass, LESS), jQuery
- o node.js, PHP (Yii, Zend)
- SQL (MySQL), NoSQL (MongoDB)
- Interface 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 classes; 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 at CMU 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 predifined 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
  - Took many mathematics classes during high school at BGSU, including advanced Probability/Statistics and Master's level Analysis.
  - Cumulative GPA: 4.0
- Saint John's Jesuit High School
  - Graduated in 2013 as Valedictorian with a cumulative GPA of 4.8.

# **Dominic Zirbel**

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