Skills

Full-stack Web Engineering

- HTML, CSS (Compass, LESS), ¡Query
- o node.js, PHP (Yii, Zend)
- SQL (MySQL), NoSQL (MongoDB)
- o 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)
- o Git extensive use for many years

Mathematics

o 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.
- o Cumulative GPA: 4.0

■ Saint John's Jesuit High School

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

Dominic Zirbel

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