FULL-STACK WEB

GENERAL PROGRAMMING

DEVELOPMENT

MATHEMATICS

DOMINIC ZIRBEL dominiczirbel@gmail.com





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 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

Now 2016 2015

2014-

2013-

2012-

EXPERIENCE

■ IMAGINE SYSTEMS **TODO** description **TECHNOLOGY** Intern; Android Summer 2016

■ 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 **T**ECHNOLOGIES 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 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 predifined 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

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

Graduated in 2013 as Valedictorian Cumulative GPA: 4.8 on a 4-point scale