Dominic Zirbel

dominiczirbel@gmail.com
412 204 7462

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 - 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 Experience in Native Android Development
Mathematics	Strong core, particularly in Graph Theory, Combinatorics, Linear Algebra, and Analysis Analytical thinking and problem solving Putnam Exam: 2013 - 10, 2015 - TBA

Experience

MetabolismFun
Full-Stack Web Engineering
July 2013 - Jan 2015

An online, educational game created to teach cellular metabolism at a university level in an engaging, interactive way.

Worked with Dr. Neocles Leontis at BGSU to develop the game for his classes and beyond; 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 with customizable settings, saved games, and a flat, smooth appearance.

Agile Oasis Technologies
Intern; Web Development
Summer 2013, 2015

Summer 2015: Developed social network site Project Qi under the supervision of Nick Pfundstein. 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 and frontend with Compass, Bootstrap, and jQuery as well as working 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.

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

Supplementary mathem classes during high school, including advanced 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