dominiczirbel@gmail.com 412 204 7462

FULL-STACK WEB HTML (Jade), CSS (Compass, LESS), JavaScript (jQuery) DEVELOPMENT

node.js, PHP (Yii/Yii2, Zend) SQL (MySQL), NoSQL (MongoDB)

Interest and real-world experience in Interface Design

GENERAL PROGRAMMING

Native Android Development - practical experience, good knowledge of the Java API and modern interface

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

MATHEMATICS

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

EXPERIENCE

MAGINE SYSTEMS **TECHNOLOGY** Intern: Android Development Summer 2016 Developed a monitoring and control tablet app to gather and display data from a manufacturing process. In order to streamline and fine tune the procedure, my app showed live data from the machine via Bluetooth; tracked averages, regressions, and errors; displayed a powerful realtime graph; and kept logs of past runs.

I used the native Android SDK in Java and my focus was on creating an app capable of handling large amounts of nearly-generic data, and finding useful ways to present it to the team.

■ 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 and support non-profit organizations. I used Yii2, MySQL, Bootstrap, and Compass 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 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.

Independent Project

GAME OF LIFE | 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 2009 - 2013 watch cells evolve, with a powerful engine for fast simulation.

EDUCATION

CARNEGIE MELLON UNIVERSITY 2013 - Current

Junior in the Mellon College of Science, double majoring in Mathematics and Computer Science Cumulative GPA (as of Aug 2016): 3.1

Bowling Green STATE UNIVERSITY 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 2009 - 2013

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

