Keith Yong

Address 346 Nicholas Ct Wilmington, DE 19808 (302) 887-0387 Contact terda12@gmail.com github.com/keithyong keithy.me

Education

University of Delaware Computer Science BS

Class of 2016

Focus in Web Development

Projects

Find my web projects at keithy.me

Online Fibonacci Calculator (December 2014)

Wrote an online nth-Fibonacci calculator in Javascript. Gives the users a choice to calculate using dynamic programming or recursion, and notifies them of the running time. Wrote an explanation under the calculator which analyzes how dynamic programming significantly reduces running time. Used D3.js and media queries to make mobile responsive recursion tree visuals.

Pomodoro Timer (January 2015)

Wrote an online pomodoro timer in pure Javascript and CSS with a focus on UX and design. Used CSS media queries to ensure a mobile ready responsive experience.

Dota Stats (February 2015)

Wrote a GitHub-like visualization of my Dota 2 (an online game) playtime using D3. Updated every 5 minutes.

Rat Dungeon Survival (December 2014)

Worked with a team to write a genetic algorithm framework in C++ that grooms a genetic rat to survive a dungeon for the most number of moves. Modeled algorithm after natural selection where the fittest rat moves to the next generation and biological reproduction where a portion of the male and a portion of the female's chromosomes are exchanged during gene crossover. Allows tweaking of different variables such as mutation chance and crossover rat to maximize rat improvement rate.

MIPS Assembly Compiler and Simulator (May 2013)

Built a MIPS Assembly language compiler and simulator in Visual Studio C#. Takes a .asm text file, parses it using regular expressions, and simulates the assembly program.

Core Skills

Algorithms

Sorting, Data Structures, Big-O analysis, NP-Complete analysis, Genetic Algorithms, Weighted Graph Algorithms

Data Structures

Queues, Stacks, Heaps, Binary Trees, Binary Search Trees, Graph Theory

Languages

Good - Javascript (Node, Express, D3.js, JQuery), CSS3 (Media Queries, Skeleton.css) Familiar - C, C++, Java, MySQL

Tools Bash, Linux, MacOS, Xcode, LaTeX