Spencer Lee

Year 4, Bachelor of Computer Science

http://github.com/spencerlee

Technical Skills

Programming: Java, C, C++, Python, MATLAB

Tools/Environment: Eclipse, Dr. Racket, Visual Studio, Unreal Engine 4

Testing: JUnit, Mocha, Jasmine

Web: HTML, CSS, JavaScript, Node.js

Technical Projects

MEG 9: Lost Echoes (Work)

September 2014 – Current

- Tactical action shooter game being developed by Skunkwerks Kinetic Industries using Unreal Engine 4, set to release on PC and Playstation 4.
- Implemented in-game dialogue, subtitles and store system, integrated user interface elements with game systems
- Worked closely with a small team of engineers to produce software based on designer specifications

Math Fluency Assessment Tool (Personal)

November 2015 - Current

- Web app designed to assess math fluency in children with developmental disabilities.
- Node.js server generates sets of questions with difficulty determined by performance on previous sets.
- Performance metrics calculated on the server in real time as each question is answered.
- Self-started and self-directed project.
- Used this project to teach myself the Node.js framework.
- Started as part of the BCS Hackathon at UBC in November 2015.

Collection Management Mobile App (School)

September 2015 – December 2015

- Mobile application that allows users to create a persistent collection of video games, movies or books by scanning bar codes of items.
- Bar code scanning is done using NGCordova barcode scanner plugin and item data is retrieved from Amazon using the Amazon Product Advertising API.
- Users are able to contact each other through the app to initiate trades for items in each other's collections.

Parking Meter Web Application (School)

July 2014 - August 2014

- Web application developed using Java, GWT and Google App Engine.
- Accessed Vancouver open data databases to retrieve locations and data for every parking meter in the city of Vancouver.
- Plotted meters on a map of Vancouver using the Google Maps API with each meter icon coloured based on price. Meters could be filtered by price and time limit.

Work Experience

Software Engineer

Skunkwerks Kinetic Industries

September 2014 - Current

- Part of a five person engineering team working on MEG 9: Lost Echoes, an game being developed using Unreal Engine 4.
- Designed and implemented in game dialogue, subtitles and upgrade systems.
- Aided in implementing and demonstrating a playable product demo of MEG 9 at PAX Prime 2015.

Lab Manager / Researcher

UBC Pain Lab

April 2010 – January 2015

- Performed behavioral encoding for a collaborative project with the University of California, San Diego Machine Perception Laboratory. The project involved detailed observation and analysis of facial actions in children aged 8-18.
- Conducted a self-directed research project on the methods used by medical professionals to detect malingering. Involved a systematic review of 1100+ peer-reviewed articles, creating and administering a survey and analyzing the data from 300 participants using exploratory factor analysis.
- Assisted 5 lab members to help them complete their directed studies research projects all while completing a personal research project.
- Analyzed survey data from for a lab member's project. The paper resulting from this project is currently being submitted for publication.

Line and Prep Cook

Memphis Blues on Robson

June 2012 - August 2013

- Served over 300 customers with a team of 4 co-workers during the restaurant's busiest lunch services. Acted as line-cook, cashier or host.
- Coordinated with co-workers to assemble and deliver catering orders for groups and companies of 200+ people.

Volunteer Experience

Webmaster and Crew Member Kalamatea Productions

October 2014 - Current

- Created and maintained website for Kalamatea Productions (http://www.kalamatea.com)
- Provided assistance on set with various production duties including scheduling, lighting and set decoration.

Education

Bachelor of Computer Science	University of British Columbia	In progress
Bachelor of Arts in Psychology	University of British Columbia	Class of 2012
Facial Action Coding System	Certification	October 2011

Interests and Activities

- Game Design
- Coding Challenges
- Online content creation and distribution
- Web development