

Diana Ly
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Education

University of San Francisco (USF)
B.S. in Computer Science, with a minor in Neuroscience

San Francisco, CA
May 2015

Technical Skills

- *Languages:* Java, Processing, C, HTML, CSS, Python, jQuery, D3.js
- *Tools:* Eclipse, svn, gcc, git, ssh, Tableau

Main Course Projects

3D Platformer Game for Physical Rehabilitation, Senior Team, C++ & OGRE Spring 2015

- Incorporated Bullet Physics library to handle collision detection and player/world physics
- Implemented third person camera, player movement and input control, menu, and head-up display
- Merged and debugged Kinect and stage builder components

2D Puzzle Platformer, Game Engineering, C# & XNA 4.0 Fall 2014

- Handled the interaction between player and platforms using AABB collision detection to trigger events such as disabling locks and transitioning to the next level
- Implemented a horizontal parallax scrolling map
- Integrated a panning camera to track the player's position and a data driven level builder

Multithreaded Search Engine and Web Crawler, Software Development, Java & MySQL Fall 2013

- Built a multithreaded search engine allowing users to search for a given query
- Implemented by crawling a given seed link and using an inverted index
- Developed secure user login credentials stored in a MySQL database

Work Experience

University of San Francisco

CS Tutor

San Francisco, CA
August 2013 – May 2015

- Tutored students in lower division CS courses
- Maintained the CS Tutoring Center website found at www.tutoringcenter.cs.usfca.edu
- Assisted in coordinating community-building and social events

Kaiser Permanente IT

Innovation and Advanced Technology Intern

Oakland, CA
June 2013 – August 2013

- Wrote basic ROS/Python scripts to move simulated turtles and a Q.bo robot to an alternate different path when a collision was detected
- Tested the Google Glass and the Leap Motion Controller to analyze the advantages and disadvantages of usage in a healthcare setting and provided tech memos
- Researched health-related start-ups and their technologies with the potential of providing better clinical services to prospective patients and lowering overall healthcare costs

Honors and Awards

- *USF, Cum Laude* Spring 2015
- *USF, Dean's List* Fall 2011 – Spring 2014
- *USF, Outstanding Student-Teachers in Computer Science Award* Fall 2013
- *Health 2.0 SF Code-a-thon: Power to the Patient, 1st place in Track 1* Fall 2013

Extracurricular Activities

- *USF Women in Science, Co-Vice President* Fall 2013 – May 2015
- *USF Animations, Comics, and Video Games, Active Member* Fall 2011 – Present