ubc science co-op
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caitlin coyiuto

major in computer science, 3rd year
personal portfolio: coyiutoc.github.io

personal projects

personal portfolio **april 2017**
• Learned CSS, HTML, Bootstrap, Javascript and JQuery to create personal website meant to showcase projects.

rollerball **march 2017**
• Took initiative to explore game development technologies by learning C# and Unity.
• Created a maze-traversal game where player collects floating cubes while avoiding collisions with enemies.

concentration game **december 2016-january 2017**
• Designed and implemented a concentration task where player's objective is to avoid contact with boundary of the GUI and moving shapes.
• Written in Java, utilizing Swing for GUI elements and JUnit for testing.
• Mouse tracking implemented with Robot and MouseInfo APIs**.**
Applet deployed using Java Web Start through Tomcat.

academic technical projects

software construction **fall 2016**
• Using Java, completed implementation of an Android application designed to plot nearest Translink bus stops/route locations. Additionally displays bus arrival times by parsing JSON data. Used JUnit.

data structures **spring 2016**
• In a team of three, designed *PixelPlayer* game, a Java GUI that plays music depending on what the user chooses to draw on the grid interface.
• Primarily in charge of back-end development such as sound production and interfacing with the GUI.

computational neuroscience **spring 2016**
• Used MATLAB to graphically model the effects of neurogenesis on interference and pattern separation for proximal similar events.
• Used a simplification of a deep-learning algorithm, the Restricted Boltzmann Machine (RBM), to artificially simulate memory performance of the RBM model at different rates of neurogenesis.

computation for the sciences **spring 2015**
• With a partner, designed a GUI on MATLAB to assist in ear training for musical theory courses.
• Used Ableton Live for generation of sound files, and implemented algorithm for computations of chord and note permutations from scratch.

skills

programming: Java • C/C++ • C# • HTML • CSS • Bootstrap • JQuery • Javascript • Assembly

tools/environment: MATLAB • UNIX • IntelliJ • XCode • Atom • Unity • Tomcat • Java Web Start • DrJava

statistics: SPSS

design: Adobe Photoshop • Adobe Indesign

music production: MaxMSP • Ableton Live • Sibelius • Amadeus Pro • Audacity

video production: Adobe Premiere Pro

education

∗ **B.CS in Computer Science** *2016-2019*
University of British Columbia, BC, Canada

∗ **B.A in Neuroscience,** *2012-2016*
Minor in Music
Wellesley College, MA, USA
3.61/4.00 GPA, *Cum Laude*

awards & recognitions

∗ **Wellesley College Student Library Award for Independent Study** *spring 2016*

∗ **Inducted into Sigma Xi (International Honor Society for Scientific Research) as Associate Member** spring 2016

∗ **Wellesley College Science Center Summer Research Award** *summer 2015*

other work experience

∗ **Research Assistant**
Mechanisms of Affect & Dysregulation Lab
Wellesley College *2014-2016*

• Tested participants using behavioral and neurophysiological (electroencephalography [EEG]) measures.

• Helped develop EEG protocol for data analysis, and produced paper from study findings.