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, 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 moving shapes and boundary of the Java GUI.
• Utilized Swing for GUI elements and implemented mouse tracking with Robot and MouseInfo APIs.
• Deployed applet using Java Web Start through Tomcat.

academic technical projects

Software Construction **Fall 2016**
• Completed Java 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 for testing.

Data Structures **Spring 2016**
• Designed *PixelPlayer* game, a Java GUI that plays music depending on what the user chooses to draw on the grid interface.
• Involved in back-end development such as sound production and interfacing with the GUI.

Computational Neuroscience **Spring 2016**
• Modelled the effects of neurogenesis on interference and pattern separation for proximal similar events using MATLAB.
• Utilized 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**
• Designed a GUI on MATLAB to assist in ear training for musical theory courses.
• Implemented algorithms 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, Minor in Music** *2012-2016*
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** *2014-2016*
Mechanisms of Affect & Dysregulation Lab
Wellesley College

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

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