caitlin coyiuto

major in computer science, 4th year
personal portfolio: coyiutoc.github.io

work experience

Directed Study – Code Conversion Project ***May 2018 - Present***
UBC Visual Cognition Lab

- Leading conversion of lab's Java codebase to utilize web technologies such as Node.js, D3.js and JsPsych.
- Implemented functional POCs for foundational JND (Just Noticeable Difference) and Stevens experiments.

SAP Jam Extensions and Platform Developer Intern ***Sept 2017-April 2018***

- Supported the introduction of bot workflow into Jam Messages by implementing OData API entities and endpoints using Ruby on Rails.
- Developed new webhooks for Jam-specific events.
- Created Jam Messages chat bots designed to provide integration with JIRA and the SAP Learning Management System.

personal 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 ***Dec 2016-Jan 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

Relational Databases ***May 2018-June 2018***

- Implemented a calendar web application that allows users to view, add and update calendar items of differing types.
- Wrote MySQL queries for the backend, and implemented all Calendar-related pages for retrieving/organizing items using PHP, Javascript and HTML.

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.

skills

Programming: Ruby • Javascript • Java • C/C++ • C# • HTML • CSS • D3.js • JsPsych • Coffeescript • Bootstrap • JQuery • Mocha • MySQL

Tools/Environment: Node.js • OData • Rails • MATLAB • Unix • Unity • Tomcat • Java Web Start

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*

research 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.

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