

# Jasmine Lai

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## Education

### University of British Columbia (UBC)

2013 - 2019

Bachelor's of Science - Biology

## Work Experience

### NCEAS

Apr 2020 - Present

*Projects Data Coordinator*

- Coordinating a team of interns and data fellows to process dataset submissions to the Arctic Data Center
- Developing internal R packages to streamline dataset submission workflows

### UBC Herbarium - Beaty Biodiversity Museum | UBC, Vancouver, BC

May 2019 - Mar 2020

*Herbarium Research Assistant / Technician*

- Managed the validation and integration of data generated from a citizen science platform
- Mentored undergraduate student projects on visualizing collections data
- Fulfilled data and loan requests to support research by students, researchers and the public

### Freelance

Jan 2019

*Computer Science Tutor*

- Taught students in CPSC 110 strategies in preparing for midterms

### Martone Lab | UBC, Vancouver, BC

Jul 2018 - Mar 2020

*Molecular Biodiversity Lab Assistant*

- Used Python scripts to manage sequence files to be submitted to BOLD and Genbank
- DNA extraction and PCR of seaweed samples
- Coordinated the samples from multiple researchers to be submitted for Sanger sequencing
- Utilized the R dplyr library to select data from lab spreadsheets to improve data submission workflow to GenBank and BOLD databases

### UBC Computer Science | Vancouver, BC

2017WT2, 2018WT1

*Undergraduate Teaching Assistant, CPSC 301*

- Helped students debug their Python and understand computer science concepts during weekly labs
- Taught labs of 30 students in debugging their Python code and understanding fundamental computer science concepts

- Utilized Bash to improve the speed of marking of 200 student lab assignments

**The National Herbarium of Canada** | Gatineau, QC

Sept - Dec 2017

*Collections Assistant, UBC Co-op*

- Coordinated and streamlined specimen imaging, annotating and sorting with coworkers to meet project goals
- Reviewed the Arctic Plant Digitization project procedures to increase efficiency
- Improved code used to rename image files for the imaging of over 100,000 specimens

**Plant Gene Resources of Canada** | Saskatoon, SK

May - Aug 2017

*Genebank Germination Assistant, UBC Co-op*

- Organized and entered seed information of native plants to be preserved in the gene bank and imported the data to Microsoft Access
- Managed the collection of plot data to be utilized in fungal pathogen research
- Organized and entered records to the Microsoft Access database

**Riesberg Lab** | UBC, Vancouver, BC

Sep 2016 - Apr 2017

*Research Assistant*

- Assisted Dr. Marco Todesco's research on determining the molecular basis of seed coat colour

**Virogin Biotech** | Vancouver, BC

Jan - Aug 2016

*Research Assistant, UBC Co-op*

- Maintained an organized lab notebook to track the samples used
- Compiled laboratory documents, recipes and protocols to be used for future employee training
- Analyzed data from ELISA experiments on Excel using student's t-test
- Maintained an organized lab notebook to track the samples used

**UBC Herbarium** | Vancouver, BC

Sept 2014 - Dec 2015

*Plants Collections Assistant, UBC work learn program*

- Organized Dr. Phil Lebednik's coralline algae collection for use in research
- Improved efficiency and accuracy of data cleaning using Excel formulas for processing donations
- Performed data entry of vascular plant and algal specimens to meet project deadlines

## Volunteer Experience

**Vancouver DataJam** *organizing committee*

2020

- Transitioning hackathon materials to a online format

**BC Children's Hospital Research Institute Beginner R Workshop** *instructor*

Mar 2020

- 5 hour workshop on ggplot and dplyr
- <https://github.com/travis-m-blimkie/introworkshop>

**Richmond Cares Richmond Gives** | Youth Now Program

2014 - 2020

*Richmond Museum Society – Board Member*

- Tailored a youth engagement action plan to attract students to interact with the museum

**Introduction to R workshop** *Instructor* | R study group

Mar 2019

- Taught class of 30 UBC members how to visualize data in ggplot

**Enriched Explorations Project** | UBC Project Seahorse

2010

*Supervisor Dr. Melissa Evanson*

- Collected seahorse population statistics using CITES online databases to identify Traditional Chinese Medicine's impact of seahorse trade in China

**Planting Science** *Scientist Mentor*

2017

- Mentored high school students to develop well designed scientific experiments
- Encouraged inquisitive thinking to help my project group approach their experimental question

**Mayne and Galiano Island Bioblitz** - *volunteer*

2019

**Western Society of Naturalists Meeting - Tacoma, WA** - *technical support*

2018

**R Ladies - Vancouver Chapter** - *organizing team*

2019- Present

**Vancouver Datajam** - *outreach coordinator*

2019-2020

## Technical Experience

**Software** Filemaker Pro, Microsoft Suite (Excel,Access,Word,Powerpoint), Rstudio

**Programing Languages** Python, Markdown, Bash

**Video Editing** Parks Canada Application: Herbarium?

<https://www.youtube.com/watch?v=3nnDfbWURyc>

**Laboratory Skills**

- PCR, gel electrophoresis, DNA extraction, ELISA

**Languages** Cantonese, Mandarin

## Certifications

- **WHMIS 2015** - Obtained May 2018
- **Pleasure Craft License**
- **Software carpentry certified instructor**

## Academic Experience

**Biology 324** | Seed Plant Taxonomy

- Using Flora of the Pacific Northwest to identify local plants collected based on morphological features with taxonomy terminology
- Applied understanding of angiosperm evolution in their relationship with other organisms

**Biology 209** | Biodiversity of algae, fungi and bryophytes

- Preparing wet mounts to identify major fungal characteristics
- Classifying collected fungi utilizing the Köhler Illumination technique

**CONS 340** | Introduction to Geographic Information Systems for Forestry and Conservation

- Completed projects using relational databases and capability and suitability models

**Biology 448** | Directed Studies

- Conducted research project, Birds & Buildings: Feather-Friendly Glass Bird Strike Monitoring & Perception supervised by Dr. Sarah Otto, Elizabeth Kleynhans and SEEDS sustainability program
- Designed a survey to gather opinions of 308 participants on the new film installation while maintaining participant confidentiality to the Behavioural Research Ethics board standards

## Awards

**cmd-f Hackathon** *2nd place winner*

Mar 2019

- Managed the project, Degree Navigator 2.0: a web app to progress of your degree
- Identified pain points of the current version

## Mentorship

