

Jessica Ngo

Vancouver, British Columbia, Canada

Phone: 778-706-8768 | Email: jessica.ngo@live.com | Github: <https://github.com/JessicaNgo>

Skills

- Data analysis using Excel, R, and Minitab
- Python, Java, C/C++, HTML/CSS, Bash scripting, Regular expressions
- Django, Django Rest Framework, Flask
- PostgreSQL, MySQL, MongoDB
- Unix environments, Celery, RabbitMQ, Unity, Restful APIs, Jenkins, Azure, Amazon EC2 & S3 storage

Technical Projects

TeleGiphy Web App (personal)

Aug 2016 – Sept 2016

- Designed and developed a fully functional web app game
- Created the game backend using Python and the Django web framework
- Implemented a simple interface using bootstrap for mobile and web compatibility
- Used extensive Git version control to manage working in a group of remote team members

Twitter Project Series (personal)

Aug 2016 – Sept 2016

- Used test-driven development in Python for all parts of the project
- Created a functional twitter clone and RESTful API using the Flask framework and using MongoDB

Experience

Software Developer

May 2017 – Dec 2017

Contextual Genomics, Vancouver

- Developing software used in computational systems worldwide to help cancer diagnosis and provide treatment options
- Working mainly on the large complex bioinformatics pipeline used to interpret assay results, including documentation, debugging, and improvements
- Exploratory data analysis for company research and development to better pipeline results
- Using Python, Django, PostgreSQL, Celery, RabbitMQ and AWS EC2 instances managed with Jenkins

Python Programmer and Data Analyst

May 2017 – Dec 2017

Shah Lab, BC Cancer Research Centre, Vancouver

- Main developer of laboratory infrastructure responsible for management of critical research metadata, lab task automation, and data analysis
- Worked extensively on the alpha release of a custom file manager with both a GUI and RESTful API interface to automatically manage terabytes of data and results across distributed servers and the cloud
- Used Django, PostgreSQL, Celery, RabbitMQ and various APIs, including the Azure Blob storage API.

Teaching Assistant – Systematic Program Design

Jan 2017 – Apr 2017

University of British Columbia, Vancouver

- Achieved a grade of 96% in the course, and was hired as a TA in the following term
- Successfully taught new and abstract concepts to struggling students, in both lab and lecture

Research Assistant

May 2016 – July 2016

Pio lab, Simon Fraser University, Burnaby

- Identified, studied and deployed various approaches and software found in literature searches
- Visualized protein structures using Pymol, and wrote Python scripts to interface with Pymol and create paper-ready models
- Wrote scripts in R and Python to automate virtual screening in AutoDockTools/VINA of over 2000 compounds, and also downstream data parsing, and ranking

Achievements: Commended for performing work on par with a Ph.D. student as the primary author on a paper presented at the 2016 World Congress in Computer Science, Computer Engineering, & Applied Computing (July 25-28, 2016)

R Package Developer (part-time)

May 2015 – Aug 2015

Hallam Lab, University of British Columbia, Vancouver

- Created an R package according to CRAN's library construction methods, protocols and standards
- Wrote an R interface to C/C++ code that enabled batches of statistical likelihood ratio tests to be run on microbial count data regressions
- Wrote python scripts to parse poorly structured and inconsistently formatted data to extract taxonomical information and counts

Extracurricular Activities

Lumohacks Health Hackathon

Sept 17 – Sept 18, 2016

- Used C# with Unity platform and the Oculus Rift Virtual Reality system to create an outside of hospital experience specifically catered to motion-sensitive patients

UBC Launchpad

Dec 2016 – Apr 2016

- Experienced working on larger projects with numerous team members
- Agile software development with Scrum, and Jira to create an native Android carpooling app

Volunteering and Community Involvement

BCITSA (BCIT Student Association) Council member and Set Representative**Interests**

- Ultimate Frisbee, learning new languages, escape rooms, and video games

Education

Faculty of Science – Honours Biotechnology with Distinction

Sept 2013 – May 2018

University of British Columbia, Vancouver

Advanced Python Programming

July 2016 – Aug 2016

Rmotr.com

Diploma of Technology in Biotechnology with Distinction

Sept 2013 – Apr 2016

British Columbia Institute of Technology, Burnaby