

Timothy SC. Jou

Github: <https://github.com/timothyjou>

Website: <http://timothyjou.github.io/>

TECHNICAL SKILLS

Programming	Web	Software	Testing
<ul style="list-style-type: none">• Java & OOP• C++ *• MATLAB*	<ul style="list-style-type: none">• HTML5*• CSS*	<ul style="list-style-type: none">• IntelliJ• Android Studio• MATLAB IDE*	<ul style="list-style-type: none">• JUNIT tests• GDB

*currently learning

TECHNICAL PROJECTS

Personal Website (<http://timothyjou.github.io/>)

Feb 2016

- Constructed and designed a website in HTML, CSS and JavaScript using the BootStrap framework and theme from startbootstrap.

Project Euler (Personal)

Sep 2015 - Present

- Solved 15 large scale mathematical problems on projecteuler.net using JAVA
- Researched and implemented several algorithms such as Sieve of Eratosthenes, Euclid's Pythagorean number in order to dissect the problem.

Mind The Gap (Academic)

May 2015 - Sep 2015

- A simple android application that allows the user to see the arrival times for a particular London tube station in real time.
- Designed and implemented a parser to extract station location and arrival times in JSON format from the London tube TFL API.
- Constructed methods to display the stations, lines, branches and closest station based on user's location data on maps using Google API.
- Debugged with JUNIT tests to capture early errors with the help of IntelliJ

Puzzle Solver (Academic)

May 2015 - Sep 2015

- A puzzle solver that is able to solve a Sudoku, slider, maze puzzle by using either DFS, BFS or BestFS
- Constructed the queue data structure using Linked list and Array for the purpose of breadth first search
- Implemented the priority queue data structure using the Heaps for the purpose of best first search.

TECHINICAL EXTRACURRICULAR ACTIVITIES

Research Assistant

Dec 2015 - Present

Chou Lab (Department of Chemistry – UBC)

Supervisor: Prof. Keng Chou

Mentor: Reza Tafteh

- Working under the supervision of a graduate student to create efficient MATLAB scripts in order to analyze large amounts of super resolution images generated from Stochastic Optical Reconstruction Microscopy (STORM).
- Implemented multiple analysis automation scripts to increase the efficiency and throughput of data analysis by over 75%.
- Researched and constructed multiple Pair Correlation analyses to calculate the correlation between the images taken in two channels from STORM.
- Manuscript will be submitted at the end of April 2016.

WORK EXPERIENCES

Research Assistant

Sep 2014 - Aug 2015

Gold Lab (Life Science Centre – UBC)

Supervisor: Prof. Michael R. Gold

- Worked under the supervision of a graduate student on a research project that involves determining the role of the protein stathmin, plays in the signaling of B cells from the B cell receptor.
- Researched, designed, and executed the experiments targeted towards this research question through the use of immuno-fluorescence microscopy and western blot analyses.
- Contributed significantly to another project focused on investigating the role that Connexin43 plays in B cell spreading by making knock out clones using the novel CRISPR-Cas9 method.
- This second project is aimed for a May submission.

Lab Assistant

May 2014 - May 2015

Canadian Centre for the Culturing of Microorganism (CCCM - UBC)

Supervisor: Donna Dinh

- Worked under the supervision of the Lab Manager to maintain various fungal and algae culture to create a library of fungi and algae for easy access.
- Propagated fungi and algae by using various aseptic technique and culturing them in the required media.

EDUCATION & AWARDS

Bachelor of Computer Science (B.CS)

Sep 2015 - Present

University of British Columbia, Vancouver, BC, Canada

- GPA: 80.8% (cumulative) 85.6% (CPSC, MATH & STAT)

Bachelor of Science (B.Sc) - Major in Microbiology and Immunology

Sep 2011- Apr 2015

University of British Columbia, Vancouver, BC, Canada

- Dean's Honor List, 2011,2012, 2013

Peace Arch Hospital Junior Auxiliary Bursary Recipient

Jun 2011

Peace Arch Hospital, White Rock, BC, Canada

Skills Canada Regional Sumo Robot – 1st place

Mar 2008

Lower Fraser Valley Regional Skills Competition – Jr. Mini Sumo Robots

ADDITIONAL PROJECTS

Connexin-43 Protein Knock Out Project

May 2015 - Sep 2015

- Worked under the supervision of a graduate student to attempt the deletion of a gene from immune cells
- Executed multiple experiments to knock out the Connexin-43 gene from immune cells using the CRISPR-CAS9 system.
- This is a manuscript in preparation.

COMMUNITY SERVICE

Junior Auxilliary Volunteer

Jul 2009 - Present

Peace Arch Hospital Emergency Room, White Rock

- Providing enhanced communications, information and support to patients/visitors.
- Serving as a liaison between staff and patients/visitors to facilitate the transfer of information.