

**Jenny Yang**  
**4<sup>th</sup> Year Engineering Physics, UBC**  
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**Work Experience:**

**BC Cancer Agency (Genome Sciences Centre) – Research/Software Intern (May 2016 – Present)**

- Performing machine learning algorithms in **Python**
- Configuring and utilizing deep learning frameworks (**Tensorflow, Theano**)
- Implementing, integrating, debugging and optimizing an autoencoder to determine and analyze the most predictive gene clusters in cancer classification
- Visualizing and presenting data (**ggplot**)
- Poster on autoencoder project won 3<sup>rd</sup> place at the International Conference of Physics Students (Aug. 2017)

**Non-Invasive Neurostimulation Therapies Lab–Research/Software Intern (Sept 2016 – Present)**

- Performing machine learning algorithms in **R**
- Implementing variable selection methods and machine learning classification algorithms to better understand and predict biomarkers for depression
- Developing scripts in **R** and **Python** to analyze and organize and visualize (**ggplot**) patient data
- Designed and developed a dynamic and informative website UI (**Javascript, HTML, CSS**) for the lab ([ninet.ca](http://ninet.ca))
- Data quality analyst and site administrator for NINET's (REDCap) CFRI and CAMH project servers (5 active projects)

**BC Cancer Agency (Genome Sciences Centre) – Software Intern (August 2016 – Sept 2016)**

- Participated in development efforts to establish data sharing infrastructure with the GA4GH database, to facilitate collaboration with others within the GSC and from other institutions
- Using **Python**, performed development, testing and configuration of a GA4GH reference server
- Loaded and validated genomic data within the reference server
- Assisted in creating documentation for new software and procedures

**SMART Technologies – Software Test Intern (Jan 2016 – May 2016)**

- With a team of 6 interns, created an Image Search add-on for the newest release of Notebook software, which has been downloaded by millions of users worldwide (**Javascript, HTML, CSS**)
- Within the LAB group, worked on stories in an agile development process with experienced developers
- Coded automated tests and frameworks (**Python, Robot Framework**) for front end UIs, back end APIs and everything in between
- Actively contributed to and participated in Nerf gun ambushes on other project sub-teams

**Presentations:**

**Jenny Yang**, Daniel Blumberger, Zafiris J Daskalakis, Colleen Northcott, Joe Tham, Raymond Lam, Jonathan Downar, Fidel Vila-Rodriguez. Machine Learning Predicts Response to rTMS in Depression. UBC Undergraduate Neuroscience Conference, Vancouver, Canada. January 25, 2018.

**Jenny Yang**, Jasleen Grewal, Steven Jones. Identifying Functional Clusters of Genes for Personalized Therapy in Medicine. The International Conference of Physics Students, Turin, Italy. August 7-14, 2017.

**Jenny Yang**, Daniel Blumberger, Zafiris J Daskalakis, Colleen Northcott, Joe Tham, Raymond Lam, Jonathan Downar, Fidel Vila-Rodriguez. Machine Learning Predicts Response to rTMS in Depression. UBC Department of Psychiatry Research Day, Vancouver, Canada. May 25, 2017.

Afifa Humaira, **Jenny Yang**, Katie Green, Nick Ainsworth, Marlon Danilewitz, Colleen Northcott, Daniel Blumberger, Jonathan Downar, Zafiris Daskalakis, Joe Tham, Raymond Lam, Fidel Vila-Rodriguez. Side Effects of rTMS in HFL vs. TBS Study for Major Depressive Disorder Treatment. UBC Undergraduate Neuroscience Conference, Vancouver, Canada. September 9, 2016.