

Montreal, Canada
+1 (514) 573-8333

Anthony G.X. Chen

anthony.gx.chen@gmail.com
<https://im-ant.github.io/>

Experience

Research Project Lead **MUHC** **May 2016 – Present**

- Developed data extraction algorithms, reduced analysis time by over 90%; they have since been adopted to other research projects and is currently being implemented as a clinical diagnostic tool

Computing Researcher **CoBrA Lab** **Summer 2017**

- Applied unsupervised learning to MRI data analysis in building a data-driven processing pipeline
- Wrote scripts to remove human intervention in data pre-processing, now used by other researchers

Teaching Assistant **McGill University** **Winter 2017**

- Course: Logic and Discrete Mathematics (Discrete Structures I)

Projects

Cluster_Stability_Analyzer **2017**

- Reduced space complexity from $O(n^2)$ to $O(n)$ in Ben-Hur's 2002 (Pacific Symposium on Biocomputing) method for stability analysis that counts the number of common edges between graphs

Monkey_Mind_Reading **2017**

- Used deep neural net (*Keras* and *TensorFlow*) to analyze biological neuron recording from monkeys
- Able to predict monkey eye movement with over 90% accuracy

ClinVar_Pathogenicity_Finder **2016**

- A highly scalable tool for automated, large scale identification of disease status using genetic information via the *ClinVar* database from the National Institute of Health

Education

Montreal, QC **McGill University** **Sept 2015 - April 2019**

- *B.Sc. Major Computer Science and Biology.* (GPA: 4.0/4.0)
- Selected coursework: Algorithms & Data Structures, Software Systems, Programming Languages, Machine Learning, Discrete Mathematics, Calculus, Probability

Awards

1st Place, Research Expo **Douglas Mental Hospital** **August 2017**

- For work done on unsupervised learning application to medical imaging analysis

NSERC Research Award **Faculty of Medicine, McGill** **April 2017**

- Selected amongst a pool of competitive applicants for a \$4500 summer research scholarship

Technologies

- Python, Shell Scripts, UNIX-based systems, Java, C, R, MATLAB, Keras, Anaconda