

Experience

Software Engineering Intern	Microsoft Corporation	Summer 2018
<ul style="list-style-type: none">Leveraged distributed computing in building a metrics pipeline for internal data visualization and analyticsTeam: Azure Event Grid, an innovative solution for event-based applications and serverless workflows		
Computational Researcher	MUHC	May 2016 – June 2018
<ul style="list-style-type: none">Developed data extraction algorithms for genomics data, reduced analysis time by over 90%; have since been adopted to other projects and is currently being implemented as a clinical diagnostic tool		
Computational Researcher	CoBrA Lab, McGill	Summer 2017
<ul style="list-style-type: none">Applied unsupervised methods to MRI data in building data-driven tool for brain image segmentationDeveloped data pre-processing pipelines to remove human interventions, adopted by other researchers		
Teaching Assistant	McGill University	Fall 2016 - Fall 2017
<ul style="list-style-type: none">Course: Logic and Discrete Mathematics, Physics - Mechanics and Electromagnetism		

Projects

ProductivityLog	2018
<ul style="list-style-type: none">Employ NLP and Bayesian machine learning to classify self-reported activities into productivity categoriesData visualization and classical statistical methods are used to find trends to inform future self-improvement	
Cluster_Stability_Analyzer	2017
<ul style="list-style-type: none">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
<ul style="list-style-type: none">Used deep neural net to analyze biological neural activity, predicted eye movement with >90% accuracy	
ClinVar_Pathogenicity	2016
<ul style="list-style-type: none">A highly scalable tool for automated, large scale identification of disease status using genetic information	

Publications

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- Trakadis, Y.J., Sardaar, S., **Chen, A.** *et al.* Machine learning in schizophrenia genomics, a case-control study using 5,090 exomes. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* (2018)
 - Chen, A.** *et al.* (2017, September). *Learning the whole from understanding its parts: In Vivo, Multimodal Parcellation of the Thalamus*. Presented at the Integrated Program in Neuroscience Retreat, McGill University

Education

Montreal, QC	McGill University	Sept 2015 - April 2019
<ul style="list-style-type: none"><i>B.Sc. Neuroscience and Computer Science.</i> (GPA: 3.97/4.0)Selected coursework: Algorithms & Data Structures, Software Systems, Programming Languages, Probability, Discrete Mathematics, Machine Learning, Calculus, Neuroinformatics		

Awards

Winner	ImplementAI Hackerthon	October 2017
<ul style="list-style-type: none">Selected from over 100 hackers, for predictive model on stock fluctuations using Reddit trends		
1st Place, Research Expo	Douglas Mental Hospital	August 2017
<ul style="list-style-type: none">For work done on unsupervised learning application to medical imaging analysis		
NSERC Research Award	Faculty of Medicine, McGill	April 2017
<ul style="list-style-type: none">Selected amongst a pool of competitive applicants for a \$4500 summer research scholarship		

Technologies

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