





ALEXANDER BARTON

CONTACT

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SKILLS

- **Languages:** Python, Java, Matlab, shell scripting (bash), SQL (Postgre)
- **Stats:** NHST, regression (poly, log), KNN, GMM, naive Bayes, PCA, ICA
- **DNNs:** CNN, LSTM, AE, GAN, SNN
- scientific writing
- grant writing
- experimental design

EDUCATION

MEng Electrical & Computer	
University of Toronto	2020
MSc Neuroscience	
McGill University	2017
BSc Neuroscience	
McGill University	2014

WORK EXPERIENCE

- MRI Research Assistant**
University of Calgary | Oct 2017 - Aug 2019
- Research Assistant**
Douglas Hospital | May - Sept 2014
- Records Assistant**
Crescent Point Energy | Apr - Sept 2011, 2012

OTHER EXPERIENCE

- EMG Triggered FES device design**
NeuroNexus | Mar - May 2019
- Volunteer Tutor**
Saturday Program | Nov 2019 - Mar 2020
YMCA | Oct 2018 - July 2019
- Research Volunteer**
Douglas Hospital | Sept 2011 - Apr 2014

CONFERENCE PUBLICATIONS

Barton, A., Zakreski, Z., & Pruessner, J. (2016). The effects of early life adversity on responses to the Montreal Imaging Stress Task. *Psychoneuroendocrinology*, 71(SS), 67. Presented at the 46th annual ISPNE, Miami, USA.

Zakreski, Z., **Barton, A.,** Cooperman, C., & Pruessner, J. (2016). Parasympathetic and adrenocortical activity influence the effects of childhood adversity on negative affect following stress. *Psychoneuroendocrinology*, 71(SS), 46. Presented at the 46th annual ISPNE, Miami, USA.

Barton, A., Taub, S., & Pruessner, J. (2015). Changes in vagal tone in response to a startle: A new protocol. *Psychoneuroendocrinology*, 61, 77. Presented at the 45th annual ISPNE, Edinburgh, Scotland.

Zakreski, Z., Feneberg, A., **Barton, A.,** & Pruessner, J. (2015). Acute mortality salience interacts with early-life adversity to predict adrenocortical reactivity to stress. *Psychoneuroendocrinology*, 61, 41. Presented at the 45th annual ISPNE, Edinburgh, Scotland.

CONFERENCE POSTERS

Cassee, R.F., Sojoudi, A., **Barton, A.S.,** & Goodyear, B.G. (2018) HiDyConn Tool-box: updates and application. Presented at the 6th biennial conference on Resting-State and Brain Connectivity, Montreal, QC

Barton, A., & Pruessner, J. (2016) Differences in stress reactivity in response to the MIST: A look at early life adversity. Presented at the 2016 annual Douglas Research Day, Montreal, QC