Daniel Flam-Shepherd email : danielfs@utstat.utoronto.ca and github

Education

Master of Science, Department of Statistical Sciences — **Toronto ON**
University of Toronto — *Sept 2017 – Sept 2018*
- Faculty Advisor : Professor David Duvenaud
- Received the *Andrews Academic Achievement Award*

Master of Science, Department of Physics — **Toronto ON**
University of Toronto — *Sept 2016 – August 2017*
- Supervisor : Professor Dylan Jones
- Topic : Learning Boundary layer physics with Bayesian neural networks

Honours Bachelor of Science, Department of Mathematics — **Toronto ON**
University of Toronto — *Sept 2011 – April 2016*
- Specialist : Mathematics and Applications in Physical Science
- Major : Statistics

Research Experience

Research Project — **Toronto ON**
University of Toronto, Department of Statistical Sciences — *Sept 2017 – present*
- Advised by Professor David Duvenaud
- We worked on topics in Bayesian deep learning specifically Bayesian neural network priors. We seek to bridge Bayesian deep learning and Bayesian nonparametrics by placing priors on functions in Bayesian neural networks. We devised several methods to achieve this.

Research Assistant — **Toronto ON**
University of Toronto, Department of Physics — *May 2017 – Aug 2017*
- Advised by Professor Dylan Jones
- Used a variety of statistical learning methods to learn a functional relationship between the planetary boundary layer depth and physical quantities commonly measured at weather stations.

Publications

1. Characterizing and Warping the function space of Bayesian Neural Networks
   Daniel Flam-Shepherd, James Requeima and David Duvenaud
   In NIPS 2018 Workshop on Bayesian Deep Learning
2. Stick Breaking Neural Latent Variable Models
   Daniel Flam-Shepherd, Yuxiang Gao and Zhaoyu Gao
   In NIPS 2018 Workshop on Bayesian Deep Learning & Workshop on All of Bayesian Nonparametrics
3. Mapping Gaussian Process Priors to Bayesian Neural Networks
   Daniel Flam-Shepherd, James Requeima and David Duvenaud
   In NIPS 2017 Workshop on Bayesian Deep Learning

Teaching

Teaching Assistant — **University of Toronto**
- STA220 Introduction to the Practice of Statistics — *Fall 2017*
- STA255 Statistical Theory — *Summer 2018*
- STA257 Introduction to Probability and Statistics — *Fall 2017*
- STA302 Methods of Data Analysis I — *Summer 2018*
- MAT135/6 Calculus 1(A) (B) — *Fall 2015, 2016 Winter 2016, 2017*
- PHY131/2 Introduction to Physics I & II — *Fall 2015, 2016 Winter 2017*