

## Education

- **University of Toronto** Toronto, ON  
*Ph.D. Computer Science* 2017 - ongoing
  - Generative modeling, representation learning, and differential equations in machine learning.
  - Supervisor: David Duvenaud
- **University of British Columbia** Vancouver, BC  
*M.Sc. Computer Science (Research Thesis Track)* 2015 - 2017
  - Research thesis on deep learning and probabilistic modeling applied to computer vision.
  - Supervisor: Mark Schmidt
- **University of British Columbia** Vancouver, BC  
*B.Sc. Joint Honours in Statistics and Computer Science* 2010 - 2015
  - Awarded the annual Nash Medal for *most outstanding graduating student* in Statistics.
  - Summer research supervisor: Kevin Leyton-Brown

## Research

FFJORD: Free-form Continuous Dynamics for Scalable Reversible Generative Models. [ **Oral** ]  
W. Grathwohl\*, **R. T. Q. Chen\***, J. Bettencourt, D. Duvenaud. *ICLR*. 2019.  
[ **Best Student Paper Award** @ AABL2018 Workshop ]

Neural Ordinary Differential Equations. [ **Best Paper Award** ]  
**R. T. Q. Chen\***, Y. Rubanova\*, J. Bettencourt\*, D. Duvenaud. *NIPS*. 2018.

Isolating Sources of Disentanglement in Variational Autoencoders. [ **Oral** ]  
**R. T. Q. Chen**, X. Li, R. Grosse, D. Duvenaud. *NIPS*. 2018.

Learning Motion Predictors for Smart Wheelchair using Autoregressive Sparse Gaussian Process.  
Z. Fan, L. Meng, **T. Q. Chen**, J. Li, I. Mitchell. *ICRA*. 2018.

Deep kernel mean embeddings for generative modeling and feedforward style transfer.  
**T. Q. Chen**. M.Sc. Thesis, *University of British Columbia*. 2017.

Fast Patch-Based Style Transfer of Arbitrary Style. [ **Oral** ]  
**T. Q. Chen** and M. Schmidt. *Workshop in Constructive Machine Learning, NIPS*. 2016.

## Work Experience

- **Software Engineer Intern** New York, NY  
*Google* 2018 Jun - 2018 Aug
  - Research on gradient boosted decision trees. Open sourced in Tensorflow contrib.

- **Applied Scientist Intern** Seattle, WA  
*Amazon.com Inc* *2017 Jun - 2017 Aug*  
 – Implementation of state-of-the-art instance segmentation methods in MXNet. Now released as open source software.
- **Teaching Assistant** Vancouver, BC  
*University of British Columbia* *2015 Sep -2017 May*  
 – “Machine Learning and Data Mining” and “Intermediate Algorithm Design and Analysis”.
- **Undergraduate Research Assistant** Vancouver, BC  
*University of British Columbia* *2014 May - 2014 Aug*  
 – Simulation of combinatorial algorithms for solving the FCC spectrum auction, supervised by Kevin Leyton-Brown.
- **Software Developer Engineer Intern** Seattle, WA  
*Amazon.com Inc* *2013 May - 2013 Oct*  
 – Prediction of customer behavior using MapReduce. Used for promotional emails.

**Awards, Grants & Honors**

Facebook Fellowship in Machine Learning (\$74,000)	2019-2021
NSERC Postgraduate Scholarships-Doctoral (\$63,000)	2018-2021
Graduate Teaching Assistant Award	2017
Nash Medal <Most Outstanding Graduating Student> (\$2,000)	2015
Science Undergraduate Research Experience (\$4,500)	2014

**Invited Talks**

Princeton University, Laboratory for Intelligent Probabilistic Systems	Sep 2018
Columbia University, Statistical ML and Computational Neuroscience	Aug 2018
New York University, Center for Data Science	Aug 2018

**Services**

Reviewer for NIPS, ICLR, ICML, BDL.