Chen, Tianle **Contact:** tianlechen@gmail.com **Mobile:** (+1) 647-863-1884

Experience

- **Rubikloud Technologies Inc.** *Data Scientist* (May 2019 - Current)
  - Optimizing promotional effectiveness and inventory for retailers with accurate demand forecasts.
  - Developed general representations for promotion mechanics, reducing forecast errors by 50% and allowing for combining and comparing different promotion types.
  - Implemented feature extraction and training pipelines on `GCP` with `Spark` and `Kubernetes`.
  - Developed prototype real-time inference service with `MLFlow` and visualization server using `Bokeh`.
- **TMX Group** *Research Intern* (Jan 2019 - Apr 2019)
  - Created representations for market volatility state with a variational auto-encoder using `Tensorflow`.
  - Generated insights on market conditions that are predictive of next-minute volatility. Check out presentation here (only works when open as `PDF`).
  - Extracted minute-level features from orders and trade tables in `Spark`.
- **Rubikloud Technologies Inc.** *Data Science Research Intern* (May 2017 - Dec 2018)
  - Developed a novel individualized demand forecasting model for joint purchase time predictions over multiple products by adapting a survival loss function to a recurrent neural network in `Tensorflow`.
  - Demonstrated that the novel approach out-performs tree-based models and standard squared-loss recurrent models for both open datasets as well as our proprietary retail datasets.

Publications

- Badescu A.L., **Chen T.**, Lin S., Tang D., *A Marked Cox model for the Number of IBNR Claims: Estimation and Application*, 2019, ASTIN Bulletin, Volume 49, Issue 3, pp. 709-739. `https://doi-org.myaccess.library.utoronto.ca/10.1017/asb.2019.15`
- **Chen T.**, Keng B., Moreno J., *Multivariate Arrival Times with Recurrent Neural Networks for Personalized Demand Forecasting*, 2018, Published in Proceedings of IEEE ICDM 2018 DMS Workshop. `https://arxiv.org/abs/1812.11444`

Education

- **University of Toronto** *PhD Statistics, Withdrew from Program* (2017 - 2019)
  - Awarded grants NSERC Engage (25,000 CAD) and Mitacs Accelerate (15,000 CAD) for research in demand forecasting at Rubikloud Technologies Inc.
  - Awarded grants Mitacs Accelerate (10,000 CAD) for research in market forecasting at TMX Group Inc.
- **University of Toronto** *MSc Statistics, GPA: 3.80/4.00* (2016 - 2017)
- **University of Toronto** *Hons BSc Statistics, GPA: 3.83/4.00* (2012 - 2016)

Last Updated: April 30, 2020