

Khanh (Chris) Tran

khanh.tran@simon.rochester.edu | (716) 513-4637 | [linkedin.com/in/chriskhanhtran](https://www.linkedin.com/in/chriskhanhtran) | [chriskhanhtran.github.io](https://github.com/chriskhanhtran)

EDUCATION

UNIVERSITY OF ROCHESTER

Rochester, NY

Master of Science in Business Analytics (STEM); GPA: 4.00/4.00

May 2020

Coursework: Core Statistics, R Programming, Predictive Analytics with Python (Machine Learning), Causal Analytics with R (A/B Testing), Social Media Analytics (NLP), Data Management, Big Data, Pricing Analytics

NIAGARA UNIVERSITY

Niagara University, NY

Bachelor of Business Administration in Accounting; GPA: 3.99/4.00

2019

Dean's List (all attended semesters); Top 5 graduated student

Coursework: Business Analytics, Linear Models, Management Information Systems, Econometrics

EXPERIENCE

Skim AI Technologies

New York City, NY

Machine Learning Research Intern (NLP & Deep Learning)

Oct. 2019 – Present

- Vectorized documents by applying CNN layers on massive pretrained Word2vec, fastText and ELMo word embeddings to feed classification algorithms.
- Fine-tuned BERT and RNN models for multiple tasks including Document Classification, Sentiment Analysis, Fact Checking, Language Generation and Document Summarization.
- Built character-based Neural Machine Translation model with CNN and Bidirectional LSTM encoder/decoder.
- Reviewed and reported latest NLP research to CTO and generated codes to reproduce research results.

Tax Technologies

Buffalo, NY

Tax Intern

Mar. 2019 – July 2019

- Provided technical supports to Fortune 500 clients utilizing Tax Series – an all-inclusive SaaS global data collection, tax compliance and provision software, and assisted on implementation engagements for new clients.
- Conducted essential application diagnostics on client financial data, including periodically generating technical reports, maintaining data integrity and monitoring client databases.
- Conducted in-depth research on tax regulations and e-file requirements in 32 states and four foreign countries.
- Performed application testing and collaborated with software engineers to build enhancement update for Tax Series.

Business Analytics Competition & Conference @ Manhattan College

New York City, NY

Data Analytics Team Leader

Feb. 2018 – May 2018

- Led a team of four students to analyze NYC and Boston government spending and contract data, winning 2nd best research poster out of 18 participating colleges.
- Cleansed (missing data, outlier detection, duplications), integrated (merge, join, subset) large datasets of 6 million records, and performed exploratory data analysis and visualization using Python and Tableau.
- Built statistical models to predict government spending, crime rate and education quality.

FEATURED PROJECTS (more details at <https://chriskhanhtran.github.io/>)

Detect Negative Airline Tweets: Performance Comparison of TF-IDF, fastText and fine-tuned BERT

- Tokenized, vectorized text data using TF-IDF and trained Naïve-Bayes algorithm for text classification.
- Applied Discrete Cosine Transform on pretrained fastText word embeddings and trained 2-layer neural network classifier.
- Fine-tuned BERT model to detect negative tweets, achieving state-of-the-art result.

Credit Risk Prediction Web App (<http://credit-risk.herokuapp.com/>)

- Preprocessed dataset of 10,000 credit applications and built machine learning models to predict credit default risk.
- Built interactive user interface using Streamlit and deployed web app on GitHub and Heroku server.

Kaggle Competition: Advanced Regression Techniques in House Price Prediction – Top 0.6% on leaderboard

- Performed comprehensive data analysis, data cleaning and feature engineering on Ames, Iowa housing dataset.
- Built and ensembled Ridge, Lasso, XGBoost, and LightGBM models to predict house prices.

Humana-Mays Healthcare Analytics Competition – Top 50 out of 460 teams

- Preprocessed 7 million medical records of 20,000 patients, identified and labeled patients with long-term opioid therapy and performed feature engineering from past diagnoses, medical claims and prescriptions.
- Built LightGBM model to predict patients with long-term opioid therapy, achieving 0.88 AUC score.

Predict Breast Cancer with PCA, RF and SVM using Python

- Performed comprehensive exploratory data analysis and PCA on the Breast Cancer Wisconsin dataset.
- Trained Random Forest and SVM models to detect breast cancer, achieving 97% accuracy rate.

SKILLS

Programming: Python (NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch), R, SQL, MATLAB

Visualization and Statistical Software: Tableau, Python (Matplotlib, Seaborn), SAS, SPSS, Adobe Suite

Machine Learning: Regressions, Random Forest, SVM, XGBoost, Unsupervised Learning (Clustering, PCA), Deep Learning