

# Anthony Chan

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A goal-oriented team-player with strong reasoning and creative-thinking skills refined through ~2 years of work experiences, a quantitative education and competitive extra-curricular activities.

## EXPERIENCE

<b>Global Data Market Analyst</b> Bloomberg L.P.	May 2020 – Present
<b>Management Consultant/Data Scientist</b> Ekimetrics	Aug 2019 – Dec 2019
Leveraged data science expertise to deliver marketing strategies. Designed compelling presentations that convinced <i>Fortune 500</i> (luxury, FMCG and insurance) executives to adopt the team's proposals. Independently extracted sizeable datasets of 10M+ records in SQL, then built, trained and tuned machine learning models in R and Python.	
<b>A.I. Researcher</b> McGill University & University of Waterloo	May – Aug, Dec 2017
Launched user studies to appraise the effectiveness of a new algorithm designed to improve webpage depiction for users with assistive needs. Co-authored academic research papers for the <i>Conference on Computer Vision</i> and <i>Winter Conference on Applications of Computer Vision</i> .	
<b>Actuary</b> FWD Insurance	Dec 2017 – Apr 2018
Performed data engineering and warehousing work. Reduced 20% of routine data transformation for month-end reporting. Automated gap analyses via ETL pipelines in Python, VBA and SQL.	

## TECHNICAL PROJECTS

<b>Improving the KNN Algorithm</b> • Experimental method to imputing missing data Constructed an alternative to the distance measure conventionally used in the <i>K-Nearest Neighbours</i> algorithm. The proposed algorithm assigns weights to each independent variate based on their scaled regression Betas. Tested the prototype over 1,000 simulations on a known dataset with randomized missingness. Results revealed that relative bias saw improvement, but run-time soared as well.
<b>Stock Price Forecasting</b> • Automated forecasting with the <i>Prophet</i> algorithm Integrated <i>Yahoo Finance</i> into the pipeline, allowing for pre-processing of the data before parsing into <i>Prophet</i> . Developed a tool requiring only 2 parameters (a stock ticker symbol and forecast horizon) to generate forecasts and display them on an interactive UI.
<b>[Ongoing] Predicting Loan Durations</b> • Implemented Extreme Gradient-Boosting Cast an <i>XGBoost</i> model on <i>Lending Club</i> 's customer loan data (~900K customers and 74 factors) from 2007 to 2015. Tuned parameters of the model to achieve high accuracy with minimal foregoing of speed.

## EDUCATION

<b>Bachelor of Mathematics, Honours Statistics</b> • Minor in Computer Science University of Waterloo
<b>Behavioural Finance</b> <b>Duke University</b> • Classical economics, loss aversion, money management, Market Life Cycle An exploration of the cognitive biases which typically mislead investors into making sub-optimal choices. Weighed risk-reward scenarios to avoid cases in which one might bear unnecessarily high amounts of risk for disproportionately low levels of reward.
<b>Bloomberg Market Concepts</b> <b>Bloomberg L.P.</b> • Economics, currencies, fixed income, equities, Terminal, portfolio management An overview of the finance industry, portfolio management and <i>Bloomberg</i> 's core value propositions.
<b>[Ongoing] Machine Learning</b> <b>Stanford University</b> • Neural networks, Support Vector Machines, outlier detection A compilation of industry-relevant machine learning concepts, many of which have inspired extracurricular projects of mine.

## SKILLS

<b>Technical</b> • R, SQL, Python, MATLAB, VBA, SAS
<b>Languages</b> • English, Cantonese, Mandarin
<b>Athletics</b> • National and provincial Taekwondo champion, 4 <sup>th</sup> Degree Black Belt
<b>Music</b> • Scholarship-winning pianist, RCM Grade 8
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