Nicholas Lo

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EDUCATION

Master of Management Analytics (MMA), Smith School of Business, Queen's University, Kingston, ON **2021 - 2022**

- GPA 4.04 / 4.3
- Student Executive, Vice President of Operations
  - Organized MMA alumni events to discuss experiences and trends within the analytics industry and provide networking opportunities for 160 graduate students
  - Conducted market gap analysis surveys of Analytics cohort for Career Advancement Centre annual event planning

TECHNICAL SKILLS

Programming Languages: Python, R, SQL

Libraries (TensorFlow, Scikit-Learn, Numpy, LightGBM, Pandas), (Dplyr, ggplot2, Shiny), (mySQL, postgreSQL)

Data Visualization, Modeling, & Presentation: Tableau, Excel, Powerpoint

Data Science & Statistics: Predictive Modeling, Hypothesis Testing, Natural Language Processing, Regression, Classification, Clustering

WORK EXPERIENCE

Research Analyst, Global Organization of EPA, DHA, and Omega-3's, Salt Lake City, UT **Dec 2020 – Dec 2021**

- Conducted data extraction and result scraping for large-scale meta-analysis of Omega-3's and its function. Main mission to construct a proprietary database and establish quality check of Omega-3 products in the market.
- Collaborated on Twitter Natural Language Processing (NLP) analysis for newly released Omega-3 products to gauge public sentiment and trends to promote positive engagement and fact check negative misinformation
- Organized monthly virtual social events of trivia, coffee chats, or online video games to expand team cohesion

High Performance Coach, The Granite Club, Toronto, ON **Nov 2018 – Nov 2020**

- Identified market gap within the client base and spearheaded an initiative that would introduce additional revenue streams resulting in intra-club partnerships and 90% client retention rate season-over-season
- Hosted seminar info-session titled: "Mythbusters: Can Weight Training Safely Improve Your Child's Athleticism and Overall Fitness" to initiate working relationships with enthusiastic clients and children looking to improve performance
- Generated predictive model of client workout bookings with self-generated database to improve capacity usage by 20%

Biomechanics Research Intern, American Sports Medicine Institute, Birmingham, AL **Sept 2017 – May 2018**

- Innovatively investigated data previously collected in the American Sports Medicine Institute database to be first to publish the link between a pitcher's movement and the movement of the released baseball
- Collaborated with biomechanics teams across Motus, ASMI, and USA Baseball to collect data for MLB sponsored study targeting effects the mound height and arm stress, leading to potential baseball policy changes
- Researched and implemented baseball statistics and sabermetrics to analyze players that overperformed or underperformed expectations from previous season to create a mock-draft list for company-wide MLB fantasy league

EXTRACURRICULAR EXPERIENCE

Member, American Baseball Biomechanics Society, Birmingham, Alabama, USA **2019 - Present**

- Authored blog post of "Baseball's: How fast is too fast?" addressing biomechanics and physiology limitations
- Aggregated 5 years of MLB pitching statistic databases to predict off-season signings with 72% accuracy

PROJECT EXPERIENCE

Nepal Earthquake 2015 Richter Predictor **2022**

- Trained model using Nepal Earthquake 2015 to predict severity of damage to buildings (level 1, 2, or 3)
- Tools: Python, GoogleCollab, LGBM, Random Forest, Neural Network, FLAML, Machine Learning, Prediction

Product Sentiment Analysis **2022**

- Extracted sentiment from product reviews using various Naïve Bayes and Logistic Regression techniques
- Tools: Python, Natural Language Processing, Naïve Bayes, Classification, Logistic Regression, NLTK

Amazon Reviews : Natural Language Processing **2022**

- Created a model to determine whether a review was helpful to customers and provide solutions
- Tools: DataBricks, PySpark, Natural Language Processing, Logistic Regression, Classification, Python

Marketing Campaign Analysis: Predicting Term Deposit Subscription **2021**

- Used results from a telemarketing campaign to model client likelihood of term deposit subscription
- Tools: Python, GoogleCollab, Logistic Regression, Random Forest, KNN, XGBoost, Prediction

Optimization Case Study: Study Buddy **2021**

- Optimized tutor hiring scenarios by building market mix models and simulations to produce best profitable results
- Tools: Simulations, Story Telling, Excel, @Risk, Powerpoint

Predictive Modeling: Billboard Top **2021**

- Generated a predictive model using song characteristics to determine if billboard song will be a top 10 hit
- Tools: Ridge Regression, Lasso Regression, Prediction, Modeling, R

Predicting Heart Disease **2021**

- Utilized external data to provide analysis and prediction whether a patient has heart disease or not
- Tools: Python, KNN, Logistic Regression, Hypothesis Testing, Random Forests, Prediction, Modeling

Forecasting Covid Cases **2021**

- Created a time-series regression model to forecast the number of Covid-19 cases that would impact Canada
- Tools: ARIMA Model, Regression, Forecasting, Time-Series, R