Andrew **Charabin**

London, Ontario

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Education

Ivey School of Business	London, Ontario

Master of Science in Management (MSc), Business Analytics *2017 – 2018*
Honors Business Administration (HBA) *2013 – 2017*

Experience

Voices	London, Ontario

Senior Manager, Data Science *Since Oct. 2021*

➢ Instituted an organization-wide data science and analytics function by recruiting, onboarding, and mentoring a cohesive team of Data Scientists, cementing competitive edge for a leading voice over marketplace.

➢ Led a team responsible for centralizing metrics, uncovering insights, and optimizing KPIs with machine learning solutions for matching, pricing, and searching on the platform, creating a powerful engine to drive platform retention and liquidity improvements.

➢ Transitioned a rules-based platform matching system to an algorithm that prioritizes voice talent matches based on the likelihood of hire using an XGBoost model, increasing job hire rate by 5 points.

➢ Built a platform pricing recommendation system by using AWS lambda to execute SageMaker models that predict a job's price and response volume, and SageMaker Pipelines to enable CI/CD, contributing to an improved yearly client retention rate from 42% to 45%.

➢ Developed a proof of concept for a voice cloning service by building upon NVIDIA's Tacotron2 implementation, creating a scalable process for training models on newly recorded voices and enabling a pilot among 10 talents on the platform.

Manager, Analytics *Sept. 2020 - Oct. 2021*

➢ Introduced best practices and formalized processes for company-wide experimental design and A/B testing, resulting in the exclusion of costly low-value tests, data quality improvements, and a culture of productive experimentation.

Team Lead, Analytics *July 2019 - Sept. 2020*

➢ Established a centralized analytics capability to develop and oversee a common picture of company performance using Tableau, provide top-down analysis to support thoughtful strategic actions, and support departments like product with operational business models and the effective use of analytics to drive their strategy, helping the company achieve 30%+ YoY growth.

➢ Grew from being the first analyst at the company to later recruiting and managing a team of analysts, initiating scalable workflow processes, and acting as the champion for data analytics at the company, facilitating a cultural shift in how data is used and justifying additional funding and responsibility through the creation of a machine learning team.

Senior Financial Analyst *April 2018 - July 2019*

CancerCare Ontario	Toronto, Ontario

Summer Student Analyst *April 2018 - July 2019*

➢ Analyzed the correlates of length of stay for Alternative Level of Care (ALC) patients using modelling techniques in R, leading to the first predictive analytics study of ALC patients in Ontario and providing insight to where reform should occur to reduce unnecessary costs and improve patient rehabilitation.

Danby	London, Ontario

Pro-bono Consultant *Sept 2016 - Dec 2016*

➢ Led a project to improve Danby Appliance's product innovation department by creating a customer-focused framework for idea creation, developing a model to predict commercial viability, and applying these processes to recommend an innovation that Danby has initiated into the research and development phase.

Skills

Languages	Python, SQL, Tableau, R
Cloud	AWS (SageMaker, Lambda, Redshift), Google (Vertex AI)
Machine Learning	Recommenders (collaborative, contextual), Regression (pricing), classification (hire, churn)
Analytics	A/B testing, operational models, metrics & insights, visualization, data stories, strategy
Deep Learning	FNNs, RNNs
Libraries & Frameworks	Flask, PyTorch, TensorFlow, XGBoost, Docker
ML Ops	Linux, Git
Frontend	JavaScript, HTML, CSS
Soft	Collegiality, structuring and communicating complexity, continuous improvement

Articles

Please check my medium profile for a full list of articles.

Engineering Features for Contextual Recommendation Engines	*April 2023*

Analysis of distinct cases where contextual information dominates

Goals, Principles & Constraints	*March 2023*

A Framework for Organizational Leadership

Selecting the Right XGBoost Loss Function in SageMaker	*Feb. 2023*

When and why you should use absolute or squared error

Projects

Please check my website for a collection of previous projects.

Text-to-speech tool with my voice	*2023*

Training

Recommendation Systems on Google Cloud │Coursera	*2023*
TensorFlow on Google Cloud │Coursera	*2023*
Google Cloud Big Data and Machine Learning Fundamentals │Coursera	*2023*
Neural Networks and Deep Learning │Coursera	*2023*

Certifications

AWS Machine Learning Specialty	*Dec. 2022*

Interests

Author for *Towards Data Science*	*2023*
Western University Varsity Tennis Player	*2013-2018*

Passion Projects

Cover of Anywhere by Passenger	*Dec. 2020*

A song I recorded by separately performing all instrumental parts – guitar, bass, drums, and vocals.