Andrew **Charabin**

Toronto, Ontario

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Work Experience

ADJ Industries	London, Ontario

Data Manager
Jun. 2023 - Present

➢ Transformed data management processes by partnering with vendors to implement a SQL server database in Microsoft Azure and improve collection of payroll hours with job floor terminals, saving $50K+ annually in admin and enabling insights for revenue optimization and order profitability.

Voices	London, Ontario

A global voice marketplace that matches and facilitates work between voice talent and their clients.

Senior Manager, Data Science & Analytics
Oct. 2021 – Jun. 2023

➢ Instituted an organization-wide data science function by recruiting, onboarding, and mentoring a team of 2 Data Scientists and a Data Analyst, creating a competitive edge for a voice marketplace.

➢ Created a powerful engine to drive platform retention and liquidity improvements by leading a team within the Technology department responsible for centralizing metrics, uncovering insights, and optimizing KPIs with machine learning (ML) solutions for matching, pricing, and searching.

➢ Reduced the time to market for new business intelligence reports and ML solutions by ~ 50% by leading a team to create core tables to use across analytics and ML use cases, manage associated queries and schedules on an EC2 instance, and facilitate migration to a new type of Redshift cluster while adopting data structuring best practices, establishing governance for the data warehouse.

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

➢ Contributed to a 3 point improvement in the yearly client retention rate by building a platform pricing recommendation system, including an AWS lambda function to invoke SageMaker models that predict a job's price and response volume, and a CI/CD solution developed within Studio.

Manager, Analytics
Sep. 2020 - Oct. 2021

➢ Established a centralized analytics capability to develop and oversee a common picture of company performance through Tableau core metric reports, and surface insights from inferential and causal models to support product and marketing strategy, helping the company achieve 30%+ YoY growth and attaining funding to integrate an ML team.

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

Team Lead, Analytics
Aug. 2019 - Sep. 2020

➢ Developed and standardized reporting and insights around platform liquidity metrics including churn, freelancer earnings, and spend retention, arming strategic discussion among the board of directors.

Senior Financial Analyst
Apr. 2018 – Jul. 2019

➢ Developed sales forecasts to guide financial targets; designed and rolled out sales comp. plans.

CancerCare Ontario	Toronto, Ontario

Data Analyst Intern
May 2017 – Aug. 2017

➢ 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 costs and improve patient rehabilitation.

Skills

Languages/Tools	Python, SQL, Tableau, R, Google Analytics 4, Heap
Cloud	AWS (SageMaker, Lambda, Redshift), Google (Vertex AI, Big Query)
Machine Learning	Regression (pricing), classification (hire, churn), recommender systems
Analytics	Experiments, causal inference, metrics & insights, visualization, data stories
ML Frameworks & Ops	PyTorch, TensorFlow, XGBoost, Linux, Git, Flask, Docker, FNNs, RNNs
Soft	Collegiality, structuring and communicating complexity, continuous improvement

Education

Ivey School of Business   London, Ontario

Master of Science in Management (MSc), Business Analytics   *Jan. 2017 – Apr. 2018*

Honors Business Administration (HBA)   *Sep. 2013 – Apr. 2017*
➢ Dean's Honor List 2014-2015

Varsity Tennis Player   *Sep. 2013 – Apr. 2018*

Certifications

Python Institute
Certified Associate Python Programmer   *Feb. 2024*
University of Santa Cruz
Bayesian Statistics Specialization   *Jan. 2024*
DeepLearning.AI
Natural Language Processing Specialization   *Jan. 2024*
University of Pennsylvania
A Crash Course in Causality: Inferring Causal Effects from Observational Data   *Aug. 2023*
AWS Training & Certification
Certified Machine Learning Specialty   *Dec. 2022*

Articles

CI/CD for Multi-Model Endpoints in AWS   *Jun. 2023*

A simple, flexible alternative for sustainable ML solutions

Goals, Principles & Constraints   *Mar. 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

Refer to this website for an overview of prior technical projects.

Text-To-Speech Tool with Andrew Charabin's Voice   *Mar. 2023*
➢ Built upon NVIDIA's Tacotron2 implementation to create a scalable process for training models on newly recorded voices; served by a flask API.

Interests

Article Author for *Towards Data Science*   *Feb. 2023 - Present*
Cover of Anywhere by Passenger   *Dec. 2020*
➢ A cover recorded by separately performing all instrumental parts – guitar, bass, drums, and vocals.