

Francisco Alborno

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Objective

Seeking a Data & Analytics Co-op position to apply my passion for data-driven solutions and my data science expertise, gained through George Brown College's Applied AI program and previous work experience, towards solving business problems, enable data-driven decision making and contributing to innovative projects. As someone intrinsically motivated to learn, grow and uncover insights from data, I am excited by the prospect developing data-driven solutions that help businesses optimize performance and achieve their goals.

Highlights of Qualifications

- Data visualization and reporting: Certified Tableau Data Analyst and a proven record visualizing complex datasets for diverse audiences with both GUI and code-based tools, including ggplot2, seaborn, PowerBI, Amplitude, and plotly.
- Machine Learning: Extensive experience training and deploying machine learning models, both supervised (LightGBM, XGBoost) and unsupervised (K-Means and hierarchical clustering) to improve business outcomes.
- Strong programming skills in SQL, Python, R, PySpark and bash scripting for data analysis and process automation. Experience with version control with Git, GitHub and GitLab for collaborative projects.
- Cloud Computing: Certified AWS Practitioner with hands-on experience with tools like Airflow, SageMaker, S3, RDS and more.
- Excellent communication and collaboration skills, including ability to present complex technical concepts to diverse audiences, as evidenced by teaching experience and [public writing in the data science domain](#).
- Proven track record fostering collaboration within cross-functional agile teams to deliver data-driven solutions.
- GenAI/LLM: Prior experience integrating OpenAI's API within Python scripts.

Technical Skills

Python and R programming, SQL, Airflow, Spark, Git, SQL, AWS, Data visualization and cleaning, ML and Deep Learning, NLP

Education and Certifications

Postgraduate Certificate Applied AI Solutions Development

Jan 2024 – Dec 2024

George Brown College – Toronto, ON (GPA: 3.93)

- Developed a Neural Network project with PyTorch to summarize scientific articles into abstracts by fine-tuning transformer models from Hugging Face.
- Developed Tableau dashboards and scorecards leveraging LAPD crime data, revealing actionable insights for a private security company operating in Los Angeles. Identified key business trends and areas for operational improvement.

Diploma in Applied Econometrics

Aug 2020 – May 2021

University of Chile – Santiago, Chile

Diploma in Big Data

Aug 2017 – May 2018

Pontifical Catholic University of Chile – Santiago, Chile

Bachelor's in Economics

Mar 2010 – Dec 2015

University of Chile – Santiago, Chile

[Tableau Data Analyst Certificate](#)

May 2024

[AWS Cloud Practitioner Certificate](#)

Aug 2022

Professional Experience

MACH (Fintech)

Aug 2022 – Jan 2024

Data Scientist – Santiago, Chile

- Enabled targeting of high-potential-value app users by integrating PySpark machine learning models with transactional data through SQL pipelines on Apache Airflow.
- Trained predictive machine learning models using AWS cloud infrastructure (SageMaker, Athena and Glue) and PySpark.
- Increased marketing spend efficiency by conceiving and evaluating high-ROI initiatives through ideation and A/B testing process, leveraging tools like Amplitude and Agile methodologies.
- Assessed ROI of referral campaigns via advanced causal inference techniques when A/B Testing was not feasible.

University for Development

Apr 2023 – Aug 2023

Data Science and AI Bootcamp Instructor – Santiago, Chile

- Delivered 5-hour weekly lectures on machine learning with Python's sklearn and graded students' work.

Marketing Advance

May 2022 – Aug 2022

Data Scientist (Contractor) – San Francisco, USA (Remote)

- Optimized advertising budget allocation through Marketing Mix Modelling, leveraging Meta's Robyn package.
- Performed validation and fine-tuning of Marketing Mix models with out-of-sample data.
- Estimated ROI for different advertising channels and provided compelling visualizations and reports to stakeholders.

WOM (Telecommunications)

Jan 2020 – Oct 2021

Data Scientist – Santiago, Chile

- Guided deployment of new network infrastructure, identifying areas where upgrades would reduce churn the most.
- Tracked network deployment results via geospatial dashboards blending network KQIs with churn and NPS metrics.
- Boosted conversion of tele sales by developing purchase propensity models with LightGBM.

Ministry of Education, Government of Chile

May 2020 – Aug 2020

Data Specialist (Contractor) – Santiago, Chile

- Developed R scripts to automatically create custom forms for a survey of higher education institutions, and then consolidated the filled forms into a single, ready-to-use Stata dataset by using Python scripts.

Walmart Chile

Data Scientist – Santiago, Chile

Nov 2018 – Jan 2020

- Trained and deployed clustering and predictive models to personalize marketing communications for loyalty program members.
- Developed [an internal R package](#) to facilitate the delivery of advanced analyses (e.g. market basket using the *apriori* algorithm) and the execution of complex recurrent SQL queries.
- Quantified the impact of personalized marketing campaigns through A/B testing, leveraging the CUPED technique to increase statistical power in the presence of small treatment effects and limited sample sizes.

Data Analyst – Santiago, Chile

Nov 2017 – Nov 2018

- Provided data-driven insights to marketing and merchants, leveraging econometrics and clear storytelling.
- Automated complex, ad-hoc reports through R Markdown and Tableau, increasing throughput of our team.
- Assessed the impact of key, C-level decisions via causal inference techniques such as Difference in Differences.

KMA Asset (Real Estate Investment Trust)

Aug 2017 – Jan 2018

Data Consultant and Power BI Dashboard Developer – Santiago, Chile

- Leveraged R to extract, transform, and load (ETL) data from multiple CRM systems.
- Developed interactive Power BI dashboards showcasing critical sales funnel KPIs and trends.

Personal Projects and Coursework

[Blog Posts about Causal Inference with R](#)

Jun 2021 - Ongoing

Authoring a series of accessible blog posts explaining key causal inference concepts and methods (e.g., Potential Outcomes, A/B Testing and Matching) for a non-academic audience.

[Advent of Code Solutions with Python and R](#)

Dec 2023

Wrote solutions and detailed explanations to puzzles from this global competition, demonstrating coding and communication skills.

[Big Data with PySpark \(DataCamp Track\)](#)

Dec 2023

Completed 24-hour course track on PySpark, covering from Spark basics to predictive modelling and recommendation engines with large datasets.

[Web App on AWS Monitoring Engagement with Politicians' Tweets](#)

May 2022

Developed an R Shiny app displaying interactive visualizations about data retrieved using Twitter's API. Data was auto refreshed and stored on S3, and the app was deployed on Amazon's EC2.

[DevOps on AWS \(Coursera Specialization\)](#)

Mar 2022

Completed this 30-hour course track, gaining familiarity with CI/CD pipelines, infrastructure as code (IaC), and test automation using AWS services (e.g., CodePipeline, CloudFormation, CodeDeploy).

[Analyzing My Music Collection with Python and R](#)

Dec 2021

Imported and wrangled iTunes data from XML file with Python's *ElementTree* and *pandas*, then used the *reticulate* package to integrate R in a single analysis script and output a nicely formatted table.

[Solutions to Exercises of "Introduction to Statistical Learning"](#)

Sept 2020

Solved exercises from this foundational textbook, demonstrating proficiency in key machine learning algorithms and statistical concepts (e.g., XGBoost, Bootstrap, SVM).