Daniel Ruiz

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PROFILE

Daniel is an Economist and Data Scientist with a strong background in Programming, Statistics, and Finance. He has developed different forecasting models in world class banks and companies using state of the art machine learning techniques. He has developed MLOPS systems using Azure and Databricks for clients. As personal projects, he has written his own website and published a personal corporate finance package to PyPi. Daniel fosters hands-on ownership, collaboration, and open feedback. He has experience using the power of Data & AI to positively influence key business decisions. Daniel has worked with German and Swiss institutions, and he speaks German professionally. He's MSc in Data Science and certified in Azure and Databricks.

SKILLS

Platforms	Airflow, Anaconda, Azure, AWS, Databricks, GitHub, Jira, Snowflake
Programming	Python, SQL, Linux/Bash, Stata, R, Octave, Power BI, Kubernetes, Docker, APIs, Git.
Python	Pandas, NumPy, Scikit-Learn, Matplotlib, MissingPy, TensorFlow, PyTorch, Streamlit, Ruff, PDM, PyTest, etc.
Machine Learning	Azure Machine Learning, PyTorch, PySpark, TensorFlow, AML, Scikit-Learn, Jupyter, Forecasting, NLP, AutoML.
Finance	Asset Pricing & Valuation, Financial Econometrics, Portfolio Analysis, Mortgage & Loans, Risk Theory, Market-Making

EXPERIENCE IN DATA

Senior Data Scientist & ML Engineer, Vattenfall (via Devoteam), Amsterdam, 2022-Now

- Scope: Vattenfall wanted to build a comprehensive greenfield Data Platform, enabling new AIML capabilities to generate more value from its data.
- Deliverables: Developed models for Energy and Gas consumption forecasting using Azure Machine Learning, designed and deployed MLOPS processes to bring these models into production (e.g. CI/CD), implemented Azure Data Factory and Databricks (Scala, PySpark) Data Pipelines to safely and robustly source data, introduced source control with Azure DevOps, strengthened the team's agile foundation,developed dashboarding solutions with Streamlit and FastAPI, and optimized costs with policies, alerts, and proper resource planning (IaaC).
- Impact: Positively changed the way data scientist's carried out their activities, and created a robust system to develop machine learning. Allowed models to move forecasting from monthly level to intra-hourly level.

- Stack: AML, ADO/Git/Pipelines, Databricks (Scala), Snowflake, Linux/Bash, PyTest, Pre-Commit, Streamlit, MLfLow, PySpark, SQL, Agile/Scrum, Iaac (ARM/BICEP).

Senior Consultant, Devoteam, Amsterdam, 2022-Now

- Scope: Devoteam is a growing tech consultancy, that specializes in Azure.
- Deliverables: Engaged customers, drafted business proposals, wrote technical articles, and attended industry events to generate and capture value to the consultancy.
- Impact: Lead the internal NL AIML Flagship, and was responsible for shaping offers and providing technical mentorship and coaching to fellow colleagues in the field of AIML.
- Stack: Sales, Business Development, Stakeholder Management.

Data Scientist & ML Engineer (Senior Analyst), Avanade, Hamburg, 2020-2022

- Scope: A Swiss pharmaceutical company wanted to develop a greenfield comprehensive AIML platform to onboard multiple use-cases related to develop models that would accelerate its Drug Development cycles.
- Deliverables: Developed MLOPS systems and processes in an agile team with different specialists (Architect, Data Engineer, DevOps, MLEs, etc). Developed a model using state-of-the-art tree algorithms to input missing data on proprietary datasets, enabling the full dataset to be used in next trainings.
- Impact: Created a platform that allowed multiple teams of Data Scientists to train models in a standardized way and bring them into production whilst complying to security rules. Onboarded team-members and created internal self-service documentation to persist area knowledge.
- Stack: AML, ADO/Git/Pipelines, Databricks (Scala), Linux/Bash, Docker, PyTest, MissingPy, TensorFlow, MLflow, PySpark, Scikit-Learn, SQL, Agile/Scrum, HTML/Wiki.

Cloud Migration Consultant, NDA (Healthtech), Toronto, Fall 2020

- Scope: A healthtech company was onboarding medical centres all over Canada to its proprietary cloud, but the process was too slow and involved physical hand-over of data. The company needed to map this process and understand how it could be expedited.
- Deliverables: Conducted structured interviews with multiple teams, mapped the cloud migration process and all handovers involved, and identified bottlenecks, quick-wins/low-hanging fruits, and structural changes needed to improve the process.
- Impact: Generated awareness of the migration process to relevant stakeholders and indicated actions that needed be taken to accelerate the process.
- Stack: LucidChart, Qualitative Interviewing, Process Mining, MS Office.

EXPERIENCE IN FINANCE

CLM Graduate Intern, Deutsche Bank, Frankfurt, Summer 2019

- Scope: Deutsche Bank
- Deliverables: Supported CLM, AML, and KYC activities to meet regulatory demands. Participated in multiple activities in Commercial Banking Operations, Tech, and Analytics.
- Impact:
- Stack: Microsoft Office, Excel, Proprietary Software.

Pricing Analyst (Data Analyst), Kroton, São Paulo, Summer and Fall 2018

- Scope: Kroton was the largest Education company in the world by Revenue with circa 1 million students in tertiary education. They hold a portfolio of thousands of products (i.e. tuition fees) that need to be set for new cohorts and readjusted for old cohorts.
- Deliverables: Used regression models to analyse competition and provide insight to the pricing strategy of 4k new products and readjust existing products. Discussed pricing strategies with stakeholders and supported local teams in optimizing planning and execution throughout the semester.
- Impact: Brought scientifical insight to the pricing team by introducing statistical concepts. Automated the daily reporting and emailing of targets, minimizing human inputs and reducing update time by 90%.
- **Stack: Microsoft Office, Excel VBA, Power BI, Agile/Scrum.**

Equity Research Intern (Data Analyst), Morgan Stanley, São Paulo, 2017

- Scope: Morgan Stanley has an Equity Research department in São Paulo, that makes the analysis and valuation of multiple Latin American public companies, to guide investors and traders in buying and selling stock.
- Deliverables: Developed and updated financial and statistical models and performed fundamental analysis and valuation of over 40 companies in Aviation, Infrastructure, Retail, and Pharma sectors. Supported two IPOs. Prepared actionable reports and participated in calls with C-level executives. Automated financial reports using Eikon & VBA, reducing update time by 90%.
- Impact: Helped two teams nourish a reputation of Expertise among investors. Also supported the delivery of two IPOs.
- **Stack: Valuation (Discounted Cashflows & Multiples), Accounting, Microsoft Office, Excel VBA, Bloomberg, Thomson Reuters Eikon.**

Offshore Client Services Intern, Itaú Asset Management, São Paulo, 2015

- Scope: IAM is the largest Asset in Brazil, with over 400 USD AuM. They invest in entities all over the world to maximize returns to
- Deliverables: Elaborated presentations and revised materials specific to international investors for both Fixed and Variable Income strategies; often, collected data directly from Bloomberg terminals.
- Impact: Kept presentations and documents impeccable and assured a timely communication with stakeholders.
- **Stack: Microsoft Office, Excel VBA, Bloomberg.**

EDUCATION

MSc in Data Science and Business Analytics, Bocconi University, Milan, 2018-2020

- Selected topics: Statistical Machine Learning, Econometrics, Advanced Statistics, Time Series, Quantitative Finance, Natural Language Processing, etc.
- Thesis: E2E design and development of a program that mined over six million tweets, performed noisy-label sentiment analysis (NLP), and predicted stock performance using machine learning and time-series methods.
- Exchange: Academic exchange at the University of Toronto (Canada), partaking MBA classes of Analytics, Quantitative Finance, and Health Consulting.

BSc in Economics, University of São Paulo, São Paulo, 2014-2017

- Selected topics: Finance, Quantitative Finance, Market-Making, Econometrics, Statistics, Macroeconomics, Microeconomics, Accounting, International Economics.

- Thesis: Analysed over 200 million stock orders from São Paulo Stock Exchange, looking for patterns of stock manipulation and market failures.
- Exchange Academic exchange at Bocconi University (Italy).

Summer Course in International Economics, LSE, London, 2016

- Selected topics: Studied models of international trade and finance, heavily based on no-arbitrage, microeconomic equilibrium, and partial differential equations.

LANGUAGES

English	Fluent (C2)
Italian	Fluent (C1)
German	Professional (B2/C1)
Portuguese	Fluent (Native)

CERTIFICATIONS

CFA Institute

- **CFA ESG:** Certificate in ESG Investing

Databricks

- **ML I:** Databricks Machine Learning Associate
- **ML II:** Databricks Machine Learning Professional

Microsoft

- **AZ400:** Azure DevOps Engineer Expert
- **AZ204:** Azure Developer Associate
- **AI102:** Azure AI Engineer Associate
- **DP203:** Azure Data Engineer Associate
- **DP100:** Azure Data Scientist Associate

Scrum.org

- **PSM I:** Professional Scrum Master I
- **PSM II:** Professional Scrum Master II