+44 7423400868 London, UK fontanads@gmail.com

Bruno Fontana da Silva

Data Scientist

Portfolio: github.com/fontanads linkedin.com/in/fontanads

I am versatile data scientist with a robust blend of industry experience and academic skills. I excel in swiftly adapting and implementing advanced techniques, such as many machine learning algorithms, data analytics and data models, to deliver impactful solutions in dynamic industries like e-commerce and mobile gaming. My approach combines deep technical proficiency in Python and SQL with a commitment to thorough research, clear communication, and effective collaboration, ensuring that complex data not only informs strategic decisions but also drives tangible business outcomes. My career trajectory, from an insightful professor to a results-driven industry expert, equips me with a unique perspective that merges deep technical knowledge with proven leadership in project execution. I have significantly impacted business outcomes of casual mobile gaming at King through personalized in-app purchase analysis, game feature optimization, and the effective orchestration of A/B tests for player engagement and revenue optimization. My expertise also streamlined marketing analytics at a top Brazilian e-commerce company, yielding substantial gains in ad performance and successful stakeholder management. Seeking a senior data science position, I aim to leverage my analytical talent and leadership skills to drive monetization strategies, business growth and strategic plan, personalization and recommender systems solutions.

SKILLS

Programming	Python (5+ years), SQL (3 years, including BigQuery), MATLAB (11 years prior experience in academia)
Cloud & DevOps	Google Cloud Platform (GCP - proficient, 2 years), Docker (Competent), Kubernetes (Familiar), CI/CD with
	Drone (Practical experience)

Data Science Tools Pandas, Numpy, Scipy (daily use for data analysis), Prophet & Statsmodels (for time-series forecasting),

Matplotlib, Seaborn, Altair, Streamlit and Looker (for dashboards and visualization)

Machine Learning TensorFlow & PyTorch (for machine learning & deep learning), Scikit-learn, Kubeflow Pipelines, Vertex AI

on GCP, Supervised learning (regression, classification, time-series forecasting), Unsupervised learning

(clustering, dimensionality reduction)

Data Engineering Airflow and Astronomer (regular use for data workflows), Data Catalogs, data modeling and ETL pipeline

design, PySpark (for large-scale data processing)

Software Development Git (3 years), Agile methodologies, Test Driven Development (TDD) with Pytest, Software design patterns,

Poetry (for dependency management), Pyenv (for Python version management)

Operating Systems Linux, MacOS and Windows

IDEs & Editors VS Code, PyCharm, Anaconda and Jupyter Lab

Soft Skills Problem solving techniques, Strong project management, Team leadership, Excellent written and verbal

communication, Experienced in teaching and mentoring

Languages English (Full professional proficiency), Brazilian Portuguese (Native speaker), French (Elementary profi-

ciency)

WORK EXPERIENCE

Data Scientist

08-2022 - Present

King (previously Activision/Bizzard, now part of Microsfot Xbox Games)

London - United Kingdom

- Collaborated with cross-functional teams, including the in-app purchases team, to design and execute tests, enhancing the understanding of user preferences regarding pricing options for virtual products in "Candy Crush Saga" (CCS).
- Developed a collaborative filtering recommender system to personalize product placements based on historical purchase data (implicit feedback), impacting user engagement, product discovery and revenue potential in CCS.
- Contributed directly to one of our game feature simulators by adding new features to the code and introduced an enhanced configuration that, once implemented in the live production environment, resulted in $\approx 0.6\%$ uplift in revenue.
- Played a key role in designing A/B testing specifications and custom tracking events for client apps, enabling the rigorous evaluation of new game features and directly influencing game development decisions in "Bubble Witch 3 Saga" (BW3S).
- Led data-driven analysis across BW3S and CCS game teams, crafting and delivering key reports on metrics such as daily active users, gross revenue, ad revenue, daily paying users, and player interaction to stakeholders.
- Provided several big data analysis using SQL (GCP Big Query) and Python to track app events, which involved evaluating completion rates and engaging players with new game features and events.
- Authored Python-based data analytics tools, encompassing data visualization, ETL processes, feature simulation, and forecasting, to support business performance and product analytics functions (e.g. game feature simulation improvements, uplift forecasting panels, model error dashboard analysis and MDE calculator).
- Enhanced software development practices by integrating continuous integration, rigorous unit testing with Pytest, thorough code reviews, and robust version control practices maintaining high-quality code standards.

Data Scientist / Marketing Analytics

08-2021 - 07-2022

Magazine Luiza (one of the largest retailers in Brazil)

São Paulo, SP - Brazil

• Automated the maintenance and provided intraday insights for smart shopping campaigns via the Google Ads API, delivering critical business intelligence to the Marketing team and supporting real-time evaluation of marketing metrics.

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- Designed and deployed rule-based models to streamline shopping campaign performance by assessing product viability through historical ad spend and ROI data, successfully reducing ad waste and optimizing cash margin.
- Conducted a comprehensive analysis of seller performance within the marketplace to determine regional conversion rates, revealing a correlation between conversion rates and customer proximity. This insight led to initiatives of strategic limitation of ad impressions for small sellers aiming for boosting investment efficiency, overall conversion rates, and local delivery performance.
- Played a pivotal role in the Advanced Analytics team, leveraging data to enhance operations across logistics, supply chain, and marketing.
- Expertly manipulated large datasets using Airflow, PySpark and maintained sophisticated SQL queries with BigQuery, enhancing data processing and operational efficiency.
- Fostered a collaborative environment through continuous engagement with the Data Engineering team, significantly improving the deployment process and performance of analytics products.
- Maintained high code quality and traceability using Gitlab for version control.
- Delivered actionable insights and strategic reports to executive leadership and operational stakeholders, driving data-centric decisions and advancing the progress of key analytical initiatives.

Data Science Instructor 03-2022 — 06-2022

Ultima School São Paulo, SP - Brazil

- I have developed instructional material (videos and tutorials) for basic Python programming, Python development interfaces (such as Jupyter Notebooks, VS Code and Google Colab) and basic statistics for data science beginners.
- I recorded live webinars with students using a code-along approach to demonstrate all the basic tools of Python programming and basic concepts of statistics.
- I have written the Data Processing module material with 4 chapters focusing on all the basic tools of the pandas library. My material contains practical examples and exercises using an open dataset of Brazilian E-commerce from Olist, available in Kaggle. I also recorded webinars with the students solving exercises and showing how to use pandas operations and table manipulation.

Assistant Professor 03-2017 - 08-2021

Instituto Federal Sul-rio-grandense (IFSul)

- Sapiranga, RS Brazil
- Lectured on a diverse range of technical courses, significantly contributing to the education of future professionals in Electromechanics, Electro-electronics, and Electrotechnics.
- Produced and disseminated educational content, amassing substantial views on the institution's YouTube page, enhancing the program's visibility and student engagement.
- Mentored and advised students in executing high-caliber research projects, leading to successful project conclusions and
 presentations. Notable projects included developing a photovoltaic panel-powered USB charger, creating a machine learning
 algorithm to detect depression symptoms in Twitter users, and implementing a facial detection system for mask usage during
 the COVID-19 pandemic.
- Successfully managed project timelines, resources, and student assignments, ensuring projects were delivered on time and with high quality, fostering an environment of excellence and innovation.
- Coordinated a student music group and produced video training materials on G-Suite tools, demonstrating strong leadership and project management skills beyond the classroom.
- Actively participated in and contributed to internal events and committees, showcasing commitment to institutional service and community engagement, and strengthening interdisciplinary collaboration.
- Collaborated with scientific research and paper publications while co-adivising master students of other institutions in research projects.

EDUCATION

Doctorate in Electrical Engineering, Federal University of Santa Catarina (UFSC)	12/2019
Master of Science in Electrical Engineering, Federal University of Santa Catarina (UFSC)	09/2015
Bachelor of Electrical Engineering, Federal University of Santa Maria (UFSM)	02/2013

COURSES AND SPECIALIZATION

Practical SQL Bootcamp for Data Analysts and Data Scientists (Udemy)

Credential ID: UC-97e47861-1a36-4c29-a230-cfb73e412551

Aug 2021

Applied Data Science Bootcamp (Alura Bootcamps) Credential ID a6ec0a14-83a6-4913-bc6e-7b3791cab646 Mar 2021

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Credential ID MB4NQGQPTBCF

PyTorch for Deep Learning with Python Bootcamp (Pierian Data Inc. @Udemy) Credential ID UC-440e0bc2-146d-48ca-8792-186c50bc30ec

Aug 2020

Deep Learning Specialization (DeepLearning.AI @Coursera) Credential ID SB9G4FPJMS8U

Jun 2019

INTERNSHIPS AND EXCHANGES

Sandwich Doctorate at Conservatoire National des Arts et Métiers (@Cedric Lab.) Paris, France

2018-2019 (5 months)

Academic Mobility at Universidad de Chile (@Postgrado Ingenería Eléctrica) Santiago, Chile 2016 (4 weeks)

Engineering Internship at Fraunhofer IZM (@System Design & Integration) Berlin, Germany

2012 (12 months)

PUBLICATIONS

- Silva, B. F. d., Le Ruyet, D., & Uchôa-Filho, B. F. (2020). Threshold-Based Edge Selection MPA for SCMA. IEEE Transactions on Vehicular Technology, 69(3), 2957–2966. doi:10.1109/TVT.2020.2966333
- Bertineti, D. P., Canha, L. N., Medeiros, A. P., de Azevedo, R. M., & da Silva, B. F. (2019, September). Heuristic Scheduling Algorithm for Load Shift DSM Strategy in Smart Grids and IoT Scenarios. In 2019 IEEE PES ISGT Latin America (pp. 1–6). doi:10.1109/ISGT-LA.2019.8895488
- da Silva, B. F. (2019, December). Strategies for multistage design of Sparse Code Multiple Access systems (Doctoral dissertation, Universidade Federal de Santa Catarina (UFSC), Florianópolis, Brazil). Retrieved August 11, 2020, from http://tede.ufsc.br/teses/PEEL1927-T.pdf
- Fontana da Silva, B., Silva, D., Uchôa-Filho, B. F., & Le Ruyet, D. (2019). A Multistage Method for SCMA Codebook Design Based on MDS Codes. *IEEE Wireless Communications Letters*, 8(6), 1524–1527. doi:10.1109/LWC.2019.2925801