Julián Lopez Baasch

{Data Scientist, Machine Learning Engineer}
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PRINCIPAL INTERESTS

Highly motivated and results-driven data scientist and machine learning engineer with a strong academic background in AI and mathematics. Skilled in utilizing Python, Git, Pytorch, Scikit, and GCP to develop innovative and effective solutions. Experienced in developing and deploying machine learning models, and knowledgeable in NLP, computer vision, deployment, RESTful API, web scraping, and leadership. Interested in taking on leadership roles and eager to bring my skills and expertise to a high-impact tech company, either as an employee or through consulting and freelancing partnerships with startups.

EMPLOYMENT HISTORY

Sr. Data Scientist
2021 - Present

Olipay, Buenos Aires, Argentina

- Successfully implemented MLFlow+Papermill to track large experiments and compare results, improving efficiency and accuracy.
- Improved MLOps practices through the implementation of several Github Actions.
- Refactored existing ML pipelines, resulting in a 50% decrease in inference time.
- Designed and implemented a multi-step feature selection algorithm based on univariate and wrapper methods to mitigate overfitting in deployed models.
- Developed custom ML feature engineering modules in Python using SciKit-Learn Transformers.

Lead Data Scientist
2021

Bimo, Buenos Aires, Argentina

- Actively engaged in daily management meetings and individual consultations with managers to understand their needs and develop effective solutions.
- Crafted a comprehensive data model to support all business units and their diverse needs, including marketing engagement, product innovation, and business growth.
- Engineered a graph-based recommender system utilizing Python and NetworkX, resulting in a substantial 5% increase in Monthly Spend Per User.
- Streamlined data pipelines from various business sources to BigQuery and spreadsheets for real-time utilization by stakeholders.
- Designed and implemented insightful dashboards for multiple stakeholders using DataStudio.

Data Scientist / Machine Learning Consultant
2019 - 2021

As a consultant, I have helped startups from LATAM and the USA to build Machine Learning solutions to their business problems.

Sr. Data Scienitst   2019 - 2021
Banco galicia, Buenos Aires, Argentina

- Demonstrated leadership skills by guiding a data science team in designing, executing, and delivering impactful data products utilizing both company data and external sources.
- Trained and deployed NLP models to accurately classify comments and posts in popular social networks such as Twitter, Instagram, and Facebook, unlocking valuable insights through opinion mining. This model was made easily accessible through a RESTful API.
- Conducted web scraping of key e-commerce platforms in Latin America, resulting in a consistent source of daily sales leads.
- Proactively tackled fraud by developing and deploying a model capable of detecting fraudulent users in social networks, based on profile picture and description analysis.

Data Analyst   2014 - 2017
DIRECTV Latin America, Buenos Aires, Argentina

- Efficiently executed analytical solutions to address various data-driven challenges facing the regional office of Customer Experience.
- Designed and executed a model that accurately measured the occurrence of repeated TV content across channels using the Jaccard Index.
- Built a predictive model to anticipate prepaid recharge behavior based on real-time analysis of media, sports, and social events.
- Developed a logistic regression model to precisely predict customer satisfaction levels based on comprehensive journey records.

ACADEMIC BACKGROUND

M.Sc. in Intelligent Systems   2019   AI-ML Group, Universitat Pompeu Fabra, Barcelona, Spain

- Conducted research in Multi-Agent Reinforcement Learning (MARL) under the guidance of Professor Martí Sànchez-Fibla, who is an expert in Artificial Intelligence and Machine Learning.
- Thesis title: "Estimating Loss Aversion in Human Behavioral Data: A Bayesian Approach using Reinforcement Learning."
- Coursework included: Machine Learning, Autonomous Systems, Pattern Recognition, Natural Language Interaction, Computer Vision, Web Intelligence, and Data-Driven Social Network Analysis.

M.Sc. in Economics   2014   Universidad Torcuato Di Tella, Buenos Aires, Argentina

- Specialized in Numerical Methods and Game Theory.
- Conducted research in quantitative finance under the guidance of Professor Nicolás Merener.
- Coursework included: Real Analysis, Measure Theory, Dynamic Programming, Evolutionary Game Theory, Causal Inference, Social and Economic Networks, and Stochastic Calculus applied to Finance.

Bachelor's in Economics   2011   Universidad Torcuato Di Tella, Buenos Aires, Argentina

- Completed a minor in Mathematics and Statistics.

TEACHING EXPERIENCE

- Undergraduate Teaching Assistant for "Law and Economics" As a TA for the "Law and Economics" course for the BS in Economics program, I played an instrumental role in providing the students with a strong foundation in the practical application and theoretical concepts. I prepared comprehensive text materials, assisted students with problem sets, and conducted group study sessions to enhance the learning experience for over 30 students.

IN-DEMAND SKILLS

- Proficiency in: Machine Learning, Deep Learning, NLP, Computer Vision, Deployment, RESTful API Development, Web Scraping, and Leadership.

TECHNOLOGICAL STACK

- Programming Languages: Python, SQL, Flask, Django, Git, Node.js, Pytorch, PyG, SciKit-Learn, Scrapy, NetworkX, OpenCV, HuggingFace, Spacy, ReactJS, and Google Cloud Platform (GCP).

PROJECTS

- Dokuso - A cutting-edge fashion discovery app that leverages OpenAI's CLIP embeddings for intelligent image search across top brands.
- TwitterGuardian Bot - An AI-powered bot that detects and alerts fake users attempting to impersonate real companies, safeguarding brand reputation on social media.
- Traffic Network Environment for Multi-Agent Reinforcement Learning - A PyTorch-powered implementation that enables experimentation with Multi-Agent Reinforcement Learning in a simulated environment modeled after the Braess Paradox.