Julia Gontijo Lopes

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EDUCATION/COURSES

Pontifical Catholic University of Minas Gerais - (PUC Minas) - 2020/01 - 2024/07
- B.S. in Computer Science
- Standout student national distinction by SBC (Brazilian Computing Society)
- Academic prominence distinction in Computer Science (first year - 2020)

San Francisco Tech Immersion and Self-study - 2024/02 - 2024/04
- Self-initiated 2-month immersion in San Francisco to conduct an intensive self-study in machine learning, with a focus on Large Language Models (LLMs) architecture and optimization techniques.

Hanyang University of South Korea - Ansan, South Korea - 2022/07 - 2022/12
- Student exchange program of one semester to South Korea, continuing studies in Computer Science where I gained valuable cross-cultural experience.
- Courses in network security, R language, algorithms, the basics of the biomedical field and embedded software design.

University of Califórnia - Santa Barbara - 2018/07
- Entrepreneurship and Innovation course in partnership with startups and technology companies.

Stanford Coursera - "Supervised Machine Learning: Regression and Classification" - 2024/01
- Online course, taught by Professor Andrew Ng focused on machine learning theory.

WORK EXPERIENCE

Scientific Research on Interpretability of Classification Models - 2023/08 - 2024/06
- Research advised by Dr. Cristiane Nori Nobrega on causality and plausibility guarantees.
- Investigated the impact of prioritizing counterfactuals with greater path density. Focused on improving Counterfactual, Selected, and Social Explanations (CSSE) - a genetic algorithm model - to generate counterfactual explanations.

Software Engineering Internship - Bwtech - 2022/04 - 2022/07 and 2023/02 - 2023/09
- Technology company focused on developing tools for monitoring and optimization of mobile networks
- Development of a more scalable and optimized architecture for Netchart PM, a cloud based software that provides analytics and dashboards for monitoring and analyzing mobile network operators performance.

Software Engineering Internship - Neurau - 2024/05 - 2022/09
- AI startup for developing personalized chatbots integrated on Whatsapp, using ChatGPT as backbone.
- Designed, prototyped and developed screen page for Neurau's platform that enabled clients to configure their Chatbots' communication style. Prior, did meetings with clients to understand their configuration needs and prompt engineering to achieve optimal configuration. Proposed improvements on other screens on the platform.

Undergraduate Research PUC Minas - Undergraduate Research Assistant - 2021/03 - 2022/02
- Urban mobility research advised by Dr. Humberto Torres Marques Neto
- Used walking profiles to compute walkability in the streets of Belo Horizonte city.

Algorithm and Data Structure III - Teaching Assistant - 2021/07 - 2021/12

Maju Beachwear - Founder - 2020/10 - 2021/12
- Founder of woman's clothing online store. Profit > $20K ARP.

SKILLS

- Development in Apache Spark, Java, C, C#, C++, Scala, SQL, Python and R.
- Fluent in English (TOEFL 106) - 2024/09
- Use of DDD, Clean Code practices, Scrum Master methodology and Continuous Feedback Culture with OKR framework. Unit Test and Integration Test creation and maintenance.
- Communication and collaboration with people from different cultures and languages

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PROJECTS

Discount Leverage - ABI Academy Hack Hackathon AMBEV (3rd place award) - 2021/11
- Discount recommendation system customized to buyer profiles on an e-commerce platform.
- Development of a system in Python that groups customers into profiles. Discounts are chosen for each profile according to the reward history obtained with the concession of these discounts.

Ocean Data - NASA Space Apps Challenge Hackathon - 2021/10
- System to backtrack the path taken by a plastic in the ocean.
- Training neural networks to estimate the path that the object found on a beach took to reach the location, using flow pattern data from a GPS buoy in the ocean.