Miguel Sarraf Ferreira Santucci

Computer Engineer

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Personal traits

I'm very communicative and outgoing, I usually get along very well in all environments, and teamwork comes naturally to me. I greatly appreciate the exchange of knowledge within each team, the more diverse, the better. Within the MBTI (Myers-Briggs Type Indicator) classifications, I'm an ENFP-A, an activist. I quickly grasp any topic and can't go without studying. As the mathematician E.C. Titchmarsh said: "It can be of no practical use to know that π is irrational, but if we can know, it surely would be intolerable not to know.".

Hard skills

- Great experience with Python language and its various libraries;
- Experience with data ingestion, processing and visualization;
- Theoretical and practical experience with diverse methods and approaches to Artificial Intelligence;
- Good use of cloud tools and services from leading market providers;
- Good use use of Microsoft Office/GSuite tools, especially Excel/Google Sheets;
- Understanding of low-level programming, from assembly to C/C++, and functional programming in Elixir;
- Understanding of electricity and electronics, as well as some experience with industrial assembly and equipment.

Professional experience

jan/2022 – current **Data Analyst**
Stefanini Scala

Activity Description

Development of on demand projects in Engineering and Data Science solutions, involving current technologies in cloud environments to address various business problems. For clients within diverse industries, I have worked as a developer and technical leader, responsible for designing solutions at the code level and ensuring the quality of deliverables. Experience with technologies ranging from data ingestion, through all stages of the data life-cycle, to visualization and AI.

may – aug/2021 **Intern**
Stefanini Scala

Activity Description

Software intern in the Analytics team. The internship revolved around a screen scraping platform for collecting information from mobile and web delivery applications. It also involved automating these processes through a simple web interface, allowing for better management of processes and clients, as well as processing and making the obtained data available.

jan/2022 – apr/2022 **Teaching Assistant**
jan/2021 – apr/2021
jan/2020 – apr/2020
Poli-USP

Activity Description

Teaching Assistant for the "Systems Programming" course taught to third-year students in the Computer Engineering program. The objective of the course is to introduce students to the basic concepts of programming paradigms in machine language and assembly. The role of the teaching assistant includes assisting students during laboratory classes by addressing their doubts, correcting assignments, and developing scripts for automated grading. I also created the programming interface used in the laboratory (see *Other projects*), as well as reworked the laboratory experiments and the course evaluation system.

jan – dec/2020 **Intern** (KonkerLabs)

may – aug/2019 **Intern** (ControlID)

jan – dec/2018 **Secretary** (Centro de Engenharia Elétrica e de Computação)

Other projects

mar/2023 – current **Data processing library**

Activity Description

Development of the *COIM* (Constraints Operator for Inferential Models) Python library for pre-processing and post-processing of data. The library aims to reduce the number of columns in datasets used in inferential models according to mathematical constraints between them, as well as to retrieve their values and calculate prediction errors. Available on PyPI.

jan – dec/2021 **Final project**

Activity Description

Work on architecture and implementation of a neural network model to classify images of handwritten digits. An interdisciplinary approach was used to create a learning model, merging concepts from psychology and neuroscience with machine learning frameworks, culminating in the implementation of a Turing Test and being awarded an Honorable Mention by the evaluating panels.

jun/2020 – jun/2021 **Scientific Research**

Activity Description

Development of an AI model to assist in singing classes, providing real-time feedback on parameters to the instructor. The project was discontinued due to the unavailability of other team members, but had shown promising results.

mai/2020-dez/2021 **Simulador de hardware**

Activity Description

Development of a simulator for a very simple processor to be used in the laboratories of the "Systems Programming" course. Although fully functional, it still needed improvements and expansions, but the project was halted as I left the course's staff. Available on GitHub.

Academic Background

2017 - 2021 **Computer Engineering** (Escola Politécnica da USP)

Languages

	School/Platform	Speaking	Listening	Writing	Reading
Portuguese		Native	Native	Native	Native
English	Cultura Inglesa	Advanced	Advanced	Intermediate +	Advanced
Spanish	Colégio Bandeirantes	Advanced	Advanced	Intermediate	Advanced
Arabic	Centro da Língua Árabe	Beginner	Beginner	Beginner	Beginner
Klingon	Duolingo and books	Intermediate -	Intermediate -	Intermediate	Intermediate -
Latin	Duolingo	Beginner	Beginner	Beginner	Beginner

Other certificates

2023 **Participation on examination board of final projects** (PCS - Poli USP)

2023 - 2024 **Formations on Data Science and project management** (Alura)

2022 **Microsoft Azure Data Engineer Associate** (Microsoft)

2022 **Process Mining** (Celonis)

2018 **Microsoft Excel** (TreinaSoft)

2015 **Brazilian Informatics Olympics** (Instituto de Computação da UNICAMP)