



Guile Vieira

Software | Machine Learning

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Education

École Polytechnique de Paris

MSc in Computer Science

(Sep 2021 – Aug 2024)

Palaiseau, France

GPA 3.95/4.00 Excellence Scholarship Fulgence Bienvenüe in recognition of academic results.

Rank 48/438 Relevant Courses: OOP in Java, Data Analysis in C++, Networking in C, Algorithms, 3D Graphics Programming, Probabilities, Statistics, Markov Chains & Martingales, Optimization, Control, Numerical & Complex Analysis.

Aeronautic Institute of Technology (ITA)

Mechanical Aeronautical Engineering

(Jan 2019 – Dec 2020)

São José dos Campos, Brazil

GPA 4.00/4.00 #2 Engineering School in Brazil by ENADE

Relevant Courses: Introduction to Computer Science in C, Data Structures and Algorithms, Computational Mathematics, Calculus I to IV, Ordinary and Partial Differential Equations, Metric Spaces.

Experiences

Squarepoint Capital

Quantitative Development Intern

(Jun 2023 – Sept 2023)

Paris, France

- **Revamped** the vol data pipeline, achieving **5x faster** processing with **8x less resources**, resulting in a **40x improvement**.
- **Optimized** the fitting process, achieving **<50ms fits**, with 60% of that time attributed to an efficient C++ engine call.
- **Published** a Python concurrent data library, surpassing multithreading with **22x faster startup** and **3x overall speed**.
- **Crafted** data applications being assessed for **deployment** by **senior engineers** from across 3 different teams.

Fly Skyler [flyskyler.com]

Full Stack Engineer

(July 2022 – Apr 2023)

São Paulo, Brazil

- **Extended** and maintained the internal system of **100K+ lines of code**, developing features that help manage **\$10K+**.
- **Developed** over 10 **data analysis** dashboards in PowerBI, **impacting decisions** of the financial and management teams.
- **Steered** the company's migration to a new platform **impacting** more than 20 employees.

Cuukin [Instagram @cuukin.app]

Product Management and Data Science intern

(Jan 2021 – Jun 2021)

London, United Kingdom

- **Applied Machine Learning** and **NLP** classifiers on a database of more than **5K web-scraped** recipes.
- **Constructed 2 data driven** applications for the **ML models**: a recommendation system and classification interface in Python.

Projects

Backdoor Detection on Transformer Language Models [github.com/guilevieiram/psc]

Research project

(Jun 2022 – Jun 2023)

Paris, France

- **Trained** over **4000** custom **GPT models**, achieving an **accuracy of 99.7%** over a **distributed network** of 100 servers.
- **Implemented** 4 types of **backdoor attacks** on that **AI**, scoring an **infection rate of 99.2%** while keeping the accuracy at **94%**.
- **Synthesized** a black-box **Meta-neural network** that classified the trojan attacks with more than **77% precision**.

Voca [voca.guilevieiram.dev]

Full Stack Engineer

(Oct 2021 – Feb 2022)

Paris, France

- **Conceptualized** and **developed** this language learning application of more than **40K lines** of code.
- Adapted **state of the art NLP** encoders to more than **3 languages** to create a custom user experience.

Skills and Languages

Python (Pandas, Scikit Learn, Torch, Spacy, Django, Flask)

JavaScript/TypeScript (React, React Native, Redux, Vue)

C – C++ – Java – Haskell – SQL

AWS – Bash – Linux – PowerBI

Cambridge CPE: 218 / 230 – Fluent (C2)

TCF: 632 / 700 – Fluent (C2)

English

French