Ewerthon Araújo Melzani

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Education

ITA-Instituto Tecnológico de Aeronáutica (Electronic Engineering 2020-2023) São Paulo, Brazil
Degree, Concentration. GPA: 4/4
Description: Intensive physical and psychological military training.Best engineering institute in Brazil.

ENSTA Paris (General engineering 2023-2026) Paris, France
Degree, Concentration. GPA: 4/4
Description: General engineer at the second best engineering school in France.
Projects: Creating a statistics library in Python in partnership with the responsible professor Maxime Ossonce

Institut Polytechnique de Paris (Applied Mathematics 2024-2025) Paris, France
Description: Master 1 research in applied and general mathematics.

Experience

CNPQ - National Council for Scientific and Technological Development São Paulo,Brazil
Researcher January 2022 – March 2023
- Using quantum logic gates(qubits and photons)to produce neural networks,linear and non-linear transformations
- Using genetic algorithms to optimize neural networks(Ex: Particle Swarm Optimization,Genetic Algorithm)
- Implementing these models and ideas in Python with the numpy and PennyLane libraries

Mupi Systems Remote,Brazil
Data scientist March 2023 – July 2023
- Applying TensorFlow and Keras tools(Python), in particular the architecture of a transformers to identify and extract data from documents
- Creating an API using Flask(Python), so that online data extraction could be used by the entire company

ENSTA Paris Paris,France
Moniteur de Bibliothèque April 2024 – July 2024
- Organization of the Library's database of books, articles and authors with Microsoft Access
- Automation of tasks related to the relevance of books and articles with Microsoft Excel

ENSTA Paris Paris,France
International student reception manager July 2024 – September 2024
- Creation of Excel spreadsheets and Latex documents as well as video classes with instructions on documents, housing and food
- Organizer of events and gatherings that encourage plurality and inclusion in the university environment

CNRS Orléans,France
Generative Models to solve Inverse Problems June 2024 – September 2024
- Implementing generative models such as DCGAN , WGAN , BIGGAN;
- Testing different regularization terms to search the best solution for inverse problems(image inpaiting, low resolution and compressed sensing);

Volunteer jobs

CASD - Curso Alberto Santos Dumont São Paulo, Brazil
Teacher March 2020 – December 2022
- Teacher at an ONG with the aim of providing opportunities for young people in situations of socioeconomic vulnerability by providing quality education for free.

Secours populaire français Paris, France
Distributor of food and basic utensils September 2024 – Doing
- Distributing food and hygiene items as well as other goods to economically vulnerable people for free.