## Frederido Vicente PhD Student in Computer Science

I'm a passionate PhD Student specializing in Machine Learning. I find leveraging uncertainty in machine learning fascinating because it enhances the reliability of learning mechanisms. I have a strong track record in pioneering NLP pipelines for real-world projects, and my research interests encompass Bayesian Inference, Optimization, Federated Learning, Cloud Computing, Privacy-constrained Learning, NLP, and MLOps. I'm committed to advancing the boundaries of machine learning and its practical applications.

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# Experience

#### **CO-FOUNDER**

JUL 2023 txtReplay Remote

OCT 2023 Head of Product and responsible for building the backend of a Text Editor system, which allows users to replay the creation of digital documents.

#### MACHINE LEARNING ENGINEER

MAR 2023 GetParrot.ai Remote

Aug 2023 Responsible for designing a machine learning pipeline to rank emails based on importance/urgency concepts and create tasks based on them to reduce

email clients' usage overhead.

#### **MACHINE LEARNING ENGINEER**

OCT 2022 Legalreview.ai Remote

OCT 2023 Responsible for designing an NLP Pipeline process to review and compare Legal Documents: Implemented data processing mechanisms to process legal files and make them searchable; implemented custom algorithms and used both Small and Large Language Models (GPT-3, ChatGPT APIs) to extract and generate language. Created a Cloud infrastructure to deploy the

NLP process, using AWS services, FastAPI and Beam Cloud.

### **MACHINE LEARNING ENGINEER**

MAY 2021 AMAZON Alexa Prize Taskbot Challange Remote

MAY 2022 Developed along with a team a multimodal Chatbot to aid ALEXA users on

Recipes and DIY tasks. Won 2nd Place. Worked on Question Answering (extractive - BERT like models & generative - BART like models).

Responsible for creating a fun facts Knowledge Base; Introduced curiosity facts over conversation flows using both Sentence Transformers and more

lightweight machine learning techniques; Used AWS Services, such as

EC2, S3, CloudWatch, Lambda, CodePipeline.

### TEACHING ASSISTANT

MAR 2021 NOVA FCT Almada/Remote

JUL 2021 Taught programming principles, Python and SQL to University students.

## Skills

#### Software

Python Pytorch Tensorflow FastAPI SQL

AWS CI/CD

### Languages

Portuguese (Native Speaker) English (C2 Proficiency)

## Education

2023 - PRESENT Computer Science, PhD.

**NOVA FCT** 

2020 - 2022

Computer Science, MS.c.

**NOVA FCT** 

2017 - 2020

Computer Science, BS.

NOVA FCT

## **Publications**

- Twiz: The Multimodal Conversational Task wizard (https://dl.acm.org/doi/abs/10.1145/3503161.3547741)
- Twiz: A conversational Task Wizard with multimodal curiosity-exploration

(https://www.amazon.science/alexa-prize/proceedings/twiz-a-conversational-task-wizard-with-multimodal-curiosity-exploration)

• The Wizard of Curiosities: Enriching Dialogues with Epistemic Fun-facts (https://sigdialinlg2023.github.io/paper\_sigdial75.html)