Hugo Pitorro

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## EXPERIENCE

Research Assistant Lisbon

Instituto de Telecomunicações - Sardine Lab

Jul. 2024 - Present

- Working on context-efficient alternatives to the transformer architecture and their interpretability mechanisms.
- o Advised by Prof. André Martins and Dr. Marcos Treviso.

Co-Founder Lisbon/Munich

SMP Technologies April 2023 - Dec. 2023

• Co-founded a startup intended to solve and automate enterprise problems and tasks with modern AI technologies (Generative AI, Computer Vision).

• Designed and built the company's business infrastructure, deployed using AWS.

Research Assistant Munich

Technical University of Munich - Sebis Lab

Nov. 2022 - July 2023

- Developed a framework for fine-tuning/evaluating various DL models in different NLP downstream tasks.
- Co-authored unpublished papers (1).
- o Advised by Prof. Florian Matthes and Anum Afzal.

#### EDUCATION

# Technical University of Munich

Munich

Master's in Informatics

Oct. 2021 - May 2024

- Thesis: Exploring Efficient Approaches for Long-Context NLP
- o Completed several courses in ML, Scientific and Quantum Computing areas.
- Built a text simplification system with a pipeline of Deep Learning models.
- Worked on a financial assistant chatbot in the Chair of Digital Finance.
- Graduated with 1.8/5 average, ECTS: A.

## Instituto Superior Técnico

Lisbon

Bachelor's in Computer Science and Engineering

Sep. 2018 - July 2021

- o Coordinated group projects in areas like Software Engineering, Distributed Systems, Networking and ML.
- Graduated with 17/20 average (received Academic Merit Distinction certificate), ECTS: A.

#### Publications

## How Effective are State Space Models for Machine Translation?

arXiv Preprint

Hugo Pitorro, Pavlo Vasylenko, Marcos Treviso, André F. T. Martins

## Projects

Politica Aberta Lisbon

https://politica-aberta.pt

Dec. 2023 - Present

- Lead Developer of a Retrieval-Augmented Generation LLM system. The open-source project intends to simplify access to the political parties' election promises and manifests.
- o Built the system using React, Flask and the OpenAI API. Github.

## Certificates

**TOEFL iBT**: 115/120 - C2 English

## Programming Skills

• Languages: Python, TypeScript, Java Technologies: PyTorch, NumPy, Docker, React