

Gabriel Silva

Aveiro, 3840-382 Portugal | 916350059

gabrielrsilva11@gmail.com

WWW: <https://orcid.org/0000-0001-6798-9827>

WWW: <https://www.linkedin.com/in/gabriel-silva-028707143/>



Dynamic professional seeking a full-time role that provides opportunities for growth and development while addressing complex challenges.

My PhD taught me to have strong interpersonal skills, effective time management, and proven problem-solving abilities that can contribute to any collaborative and results-driven work environment.

I am committed to delivering high-quality research and fostering positive relationships within teams. Eager to make the jump from academia to industry so that I can impact the lives of millions.

Education

Expected in February
2026

Ph.D. in Computer Science

University of Aveiro at Portugal

- Work done on multi-lingual Open Information Extraction with a focus on Portuguese. Focused on using Knowledge Graphs and merging them with Language Models for better language understanding.
- The programme is collaboration Program between 3 of the top Universities in Portugal (Aveiro, Porto and Minho).

Expected in December
2025

Ph.D. in Computer Science

Linköping University at Sweden

- Exchange student in the NLP group of the Linköping University.

2021

Master of Science in Computer Engineering

University of Aveiro at Aveiro, Portugal

- Worked on processing Ontologies and Text and creating classifiers that can align text (Job offers) with a given Ontology (ESCO).
- The final product was a Platform providing the region of Aveiro and the University with employment data and the skills that are missing from the region to better steer public policies.

Work history

June 2020 - Current

Researcher

IEETA / Universidade de Aveiro, Aveiro

- Published several papers on topics related to Natural Language Processing (NLP) and Knowledge Management (Knowledge Graphs, Ontologies), mainly focused on Open Information Extraction and Named Entity Recognition.
- Won funding for the project 'Natural Language Processing based on Graph Machine Learning and Deep Learning for Information Extraction' at the call Call on Advanced Computing Projects: Artificial Intelligence in Cloud (2nd edition). Collaboration between RNCA and Google. Project awarded 100% funding and 9.22 out of 10 (best grade).

- Collaborated with other departments and researchers in different areas (tourism and chemistry) on Projects that required Machine Learning insights which lead to the creation of more papers.
- Spent a semester abroad at Linköping University fostering relationships between Research Units and collaborating with their NLP group.
- Attained certifications for Machine Learning and CNNs
- Organization Committee SLATE'24: Part of the Organization Committee for SLATE (Symposium on Languages, Applications and Technologies) 2024.

September 2024 -
Current

Assistant Professor

ESTGA - Universidade de Aveiro, Portugal

- Taught classes to Masters and Bachelor students, these classes were focused on Knowledge Graph Databases and Object Oriented Programming.
- Graded and created tests and assignments.
- Maintained regular office hours to provide struggling students with additional course help.

January 2022 - March
2022

Web and Android Developer

G-Lok Systems, England

- Development of an Android app and Web Page for visualization of GPS signals by trucks using IoT devices.

August 2017 - October
2017

Web Developer

Turners (Soham), Soham, United Kingdom

- Creation of a web portal for internal use that helped with yard management and truck positioning for their main loading / repairing site.
- Development was mainly done with JavaScript and PHP

Main Publications

- **Benchmarking Portuguese Open Information Extraction** - LREC 2026 - Under Review
- **Deepening Graph-Based Approaches for Portuguese Open Information Extraction with LLM Augmentation** - Computer Speech and Language Journal - Gabriel Silva; Mário Jorge Ferreira Rodrigues; António Joaquim da Silva Teixeira; Marlene Amorim
- **Inductive Learning on Heterogeneous Graphs Enhanced by LLMs for Software Mention Detection** - ACL 2025 SDP Workshop - 07/2025 - Gabriel Silva; Mário Jorge Ferreira Rodrigues; António Teixeira; Marlene Amorim
- **Automating Job Post Alignment With Esco For Labor Market Insights** - WorldCIST25 - 04/2025 Gabriel Silva; Mário Rodrigues; Marlene Amorim; Armando Pinho
- **Advancing Open Information Extraction for Portuguese by Leveraging Graph Structures and Large Language Models** - IberSPEECH - 11/2024 - Gabriel Silva; Mário Rodrigues; António Teixeira; Marlene Amorim
- **OPENER - Open-NER in domains without annotated resources** - IberSPEECH - 11/2024 - Emanuel Matos; Gabriel Silva; Mário Rodrigues; António Teixeira

Skills

- Information Retrieval
- Knowledge Graphs
- Ontologies and Knowledge Representation
- Natural Language Processing
- PyTorch
- Named Entity Recognition
- Graph Machine Learning
- Language Models
- Python

Certificates

- Machine Learning - Coursera: Course by Stanford that teaches the fundamentals of Machine Learning, from the basic models to neural networks and the math behind them.
- Convolutional Neural Networks: deeplearning.ai course on Convolutional Neural networks for computer vision taught on Coursera.

Personal Projects

- Local LLM Deployment 01/2025 – Present: Interested in learning about local LLMs and the whole deployment pipeline as well as building RAG systems.
- Precision GPS location with the Sigfox network 09/2017 – 05/2018: Development of a precision gps location module using an arduino board and the low latency sigfox network.

Languages

Portuguese



English



Spanish



German



Interests

Information Retrieval, Knowledge Engineering, Natural Language Processing, Large Language Models, Ontologies, Knowledge Graphs