

Profile

I hold a Ph.D. in Informatics Engineering and have over a decade of experience in designing, developing, and managing information systems. I have also served in several leadership roles within the government of Timor-Leste, including as a Non-Executive Board Member of the National Communications Authority (ANC) from December 2018 to August 2021. I am passionate about advancing AI, Information Retrieval, and Natural Language Processing for Tetun.

PROJECTS:

- Labadain Chat: An LLM-based conversational assistant designed specifically for Tetun speakers (www.labadain.com).
- Labadain Search: A monolingual search engine developed specifically for Tetun speakers (www.labadain.tl).
- Timor News: An online news portal exclusively publishes news in Tetun (www.timornews.tl).
- Timor News (old site): A news portal (https://old.timornews.tl).
- Labadain Crawler: A data collection pipeline for web crawling (https://github.com/gabriel-de-jesus/labadain-crawler).

GABRIEL DE JESUS

EDUCATION

Faculty of Engineering, University of Porto (FEUP), Portugal

September 2021 – September 2025 Ph.D. in Informatics Engineering

Faculty of Science, University of Porto (FCUP), Portugal

September 2011 – July 2013 Master's in Computer Science

National University of Timor-Leste (UNTL), Timor-Leste,

September 2005 – June 2008 Bachelor's in Informatics Engineering.

WORK EXPERIENCE

Timor News | Founder

May 2019-Present (6+ years)

I am responsible for developing strategic plans and implementing standard business procedures to achieve long-term objectives, including overseeing and guiding the team to ensure that the company's goals are met.

Chemonics International (HRH2030 Program, USAID-funded project) | Human Resource Information System Manager

July 2019–February 2021 (1 year 8 months)

My roles included conducting a feasibility study, developing functional requirements for the Training Management Information System (TMIS), and customizing the iHRIS Train toolkit to meet those needs. To ensure optimal performance, I specified the requirements for an on-premise server, purchased and configured it, and used it to host the TMIS web-based system. I also prepared comprehensive user and system administrator manuals for the TMIS, including conducting formal training sessions.

Autoridade Nacional de Comunicações (ANC) | Non-Executive Board Member December 2018–August 2021 (2 years 9 months)

My responsibilities were defined under Article 8 of the Telecommunications Decree-Law no. 15/2012, dated March 28, 2012. In this capacity, I contributed to governance and strategic oversight of the telecommunications sector, participated in regulatory decision-making, and supported the development and enforcement of policies that promoted compliance and fair competition.

RESEARCH AND PUBLICATIONS

Research: I am an Affiliate Researcher with INESC TEC, based in Timor-Leste. My research interests include Information Retrieval, Natural Language Processing, and Generative AI, with a particular focus on empowering low-resource languages, through innovative and inclusive technologies. I believe that research should create real-world impact and my goal is to make digital tools more accessible, equitable, and culturally relevant.

My research publications are available on Google Scholar:

https://scholar.google.com/citations?us er=puPeaEUAAAAJ&hl

TEACHING EXPERIENCE

Feb 2015-Jun 2016: Invited lecturer at the Instituto Profissional de Canossa (IPDC). *Taught courses in* data warehouse, data mining, and object-oriented programming.

Aug 2013-Dec 2013 and **Feb 2009-Jun 2009:** Invited lecturer at the Universidade Nacional Timor Lorosa'e (UNTL). *Taught* ICT and database courses.

SUPERVISION EXPERIENCE

September 2024-July 2025:

- <u>Co-supervising</u> a master's student in Informatics Eng. at FEUP, Porto, Portugal, working on integrating semantic search in a sports search Engine.
- <u>Supervising</u> one undergraduate student in Information Systems at the Escola Superior de Tecnologia e Gestão (ESTG), Felgueiras, Portugal, working on cross-lingual IR in Tetun.

CONTACT

Mobile/WA: +670 7733 2224

Email: gabrieldejesusphd@gmail.com

LinkedIn:

https://www.linkedin.com/in/gabrieljesus/

Food and Agriculture Organization (FAO) | Database Design and

Implementation Expert Consultant

November 2018–March 2019 (5 months)

My roles included ensuring quality and compliance of the Suco Level Food Security Monitoring System (SLMS) development agreement, while advising the Ministry of Agriculture and Fisheries (MAF) on the SLMS workflow. Additionally, I provided training and support to end-users to ensure the successful implementation of the system.

Inovar4 Lda | Information Technology Manager

October 2017–November 2018 (1 year 2 months)

My responsibilities included overseeing the networking and server infrastructure of several companies. This included upgrading servers and migrating data, as well as providing technical guidance and support to other technicians.

Major Project Secretariat (MPS)/Infrastructure Fund (IF) | Coordinator of the

Administration and Information Technology (IT) Directorate

January 2014–September 2017 (3 years 9 months)

I served as the head of the IT and Administration Directorate, overseeing the Department of Administration & Human Resources and the Department of Procurement, Logistics, IT, and Databases. In this role, I planned, managed, and supervised the IT infrastructure, information systems, administration, human resources, procurement, budget planning, logistics, and document management to ensure efficient and effective operations.

Quidgest Lda | Software Developer and Project Manager

August 2013–December 2013 (5 months)

I managed and developed information systems projects, ensuring the timely delivery of software developed by the company. In addition, I provided technical support and training to the end-users of the company's clients and ensured the effective implementation and maintenance of the software.

Timor Telecom | Senior Database Administrator

September 2009–August 2011 (2 years)

I managed and administered the mediation and billing databases, which included the integrated customer management system, NGIN (Next-Generation Intelligence Network), and the post-paid mobile and internet services provider. In this role, I addressed fraud issues and collaborated with the marketing team, developing new applications for the company.

Quidgest Lda | Software Developer

July 2008–August 2009 (1 year 2 months)

My responsibilities included software and database development, implementation, and maintenance. I also provided support and training to end-users to ensure efficient use of the software.

World Bank | Information System Developer Internship

July 2007–September 2007 (3 months)

My roles included designing and developing an Inventory Management System (IMS) for the logistics team to improve inventory tracking and management.