# Luís Barbosa

# Curriculum Vitae

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"We all have our time machines. Some take us back, they're called memories. Some take us forward, they're called dreams." - Jeremy Irons

# Education

2014–2019	<b>Integrated Master in Informatics and Computing Engineering</b> , FEUP (Faculty
	of Engineering of the University of Porto), Porto, GPA: 16 out of 20.

2011–2014 Sciences and Technologies, Escola Secundária José Régio, Vila do Conde, GPA: 17.1 out of 20.

2010–2011 Basic Education, Escola Secundária José Régio, Vila do Conde.

2006–2010 Basic Education, EB 2/3 Frei João, Vila do Conde.

2004–2005 English Student, EB 1 Benguiados, Vila do Conde.

2002–2006 Basic Education, EB 1 Sininhos, Vila do Conde.

### Master's Thesis

Title Intelligent Analysis of Complaints

Supervisors Professor Henrique Lopes Cardoso & Ph.D. student Gil Rocha

Description This thesis explored the use of different approaches and features to perform the

classification of free text using natural language processing techniques.

Institution LIACC - Artificial Intelligence and Computer Science Laboratory

GPA 18 out of 20

# Experience

## Vocational

2019–Present **Researcher**, LIACC/FEUP, Porto.

The IA.SAE - Inteligência Artificial na Segurança Alimentar e Económica (Artificial Intelligence in Food and Economic Security) project aims to streamline some of the processes performed inside ASAE - Autoridade de Segurança Alimentar e Económica (Economic and Food Safety Authority).

As a researcher in the project, I have tested multiple machine learning and natural language processing (NLP) techniques and implemented a prototype ("TextCategorizer") that receives data and returns a predicted label or set of labels, allowing to easily try, test and deploy several text categorization techniques.

The "TextCategorizer" project is available on github.com/LuisVilarBarbosa/TextCategorizer. Additionally, I helped some students with their Master's Thesis and works oriented to NLP and worked on new features for the ArgMine Platform, a platform for annotating arguments in texts that has been used by students in Universidade Católica Portuguesa since early 2020.

#### 2018–2019 **Operations Chair**, TALK A BIT 2019, Porto, GPA: 17 out of 20.

Talk a Bit 2019 was a non-profit tech conference organized by graduating MIEIC (Integrated Master in Informatics and Computing Engineering) and MESW (Master in Software Engineering) students at FEUP, the Faculty of Engineering of the University of Porto, focusing on the future of technology. The conference started in 2013 with less than 150 attendees and emitted 500 tickets in 2019.

As an Operations Chair, I had to manage all the tasks necessary to assure that the conference had the equipment, spaces and personnel necessary to ensure the successful holding of the conference, had to delegate tasks between the members of the Operations department and had to communicate with entities of FEUP and some external entities to ensure some services.

The organization of this conference can be consulted on talkabit.org/organization.html.

# 2018 Back-End Developer, FEUP/ITGROW/CRITICAL SOFTWARE, Porto, GPA: 18 out of 20.

As part of the Project Management Laboratory course unit, I worked on the project "Beyond Sight", a project proposed and developed for iTGrow/Critical Software that aimed to allow total or partially blind people to follow Microsoft Office PowerPoint presentations by showing the presentation on a website in real-time. Once the presentation is displayed on the website, it is possible for a screen reader to read the text to the user.

The website was developed using React Native and Node.JS.

### 2017–2018 Back-End Developer, FEUP, Porto, GPA: 17 out of 20.

As part of the Software Development Laboratory course unit, I worked on the creation of a website that presented the project "Stop PropagHate" and demonstrated how it worked. "Stop PropagHate" is an API that aims to bring to the Internet an environment without hate speech using natural language processing techniques.

This project received support from Google's Digital News Initiative.

#### 2017 **Profession Week: Engineer**, FEUP, Porto.

As part of the Graphical Applications Laboratory course unit, I was later invited to present the developed work on the SPE - "Semana Profissão: Engenheiro" (Profession Week: Engineer) which took place on March 27, 28 and 29, 2017.

The invitation was made due to the performance in the course unit and due to the quality of the developed work, having obtained a GPA of 19 out of 20.

The developed work is available on github.com/LuisVilarBarbosa/LAIG and a working version can be accessed through luisvilarbarbosa.github.io.

# 2014–2019 University Projects, FEUP, Porto.

Several projects developed in group, using different languages and technologies:

- Programming Languages: C/C++, C#, Java, JavaScript, PHP, Prolog, Python.
- o Programming tools: Microsoft Visual Studio, Eclipse, Git, Atom, Visual Studio Code.
- o Databases: SQLite, PostgreSQL, SQLServer, MySQL.
- Web Technologies: HTML, CSS, Bootstrap, jQuery, WebGL, Node.JS.
- Software Testing: Mocha.
- Operating Systems: Microsoft Windows, Linux.
- Others: PayPal PHP SDK, Docker, .NET, Android, Xamarin, LATEX, Kettle.

Some of these projects are available on github.com/LuisVilarBarbosa.

#### Miscellaneous

2019-Present Worked in the "TextCategorizer" project which allows to easily try, test and deploy several text categorization techniques.

This project is available on github.com/LuisVilarBarbosa/TextCategorizer.

- 2018—Present Worked in the "openvpn-server" project which allows to easily install an OpenVPN server on a Ubuntu/Debian-based machine.
  - This project is available on github.com/LuisVilarBarbosa/openvpn-server.
  - 2017 Worked in the "FilesStructureAnalyser" project which allows performing several types of comparisons and some other operations between files and directories.

    This project is available on github.com/LuisVilarBarbosa/FilesStructureAnalyser.
  - 2012–2013 Class Delegate (11<sup>th</sup> year), Escola Secundária José Régio, Vila do Conde. In addition to the normal duties of a class delegate, I participated in class council meetings.
  - 2011–2012 Class Delegate (10<sup>th</sup> year), Escola Secundária José Régio, Vila do Conde.
  - 2010–2011 Class Delegate (9th year), Escola Secundária José Régio, Vila do Conde.
  - 2009–2010 Class Delegate (8th year), EB 2/3 Frei João, Vila do Conde.
  - 2007–2008 Class Delegate (6<sup>th</sup> year), EB 2/3 Frei João, Vila do Conde.

# Awards

- 2016 Certificate of 2<sup>nd</sup> place on the Competition "1<sup>st</sup> Programming for Optimization and Performance (POP'16)" organized by the SPeCS laboratory and the IEEE Student Branch of FEUP Faculdade de Engenharia da Universidade do Porto, Porto.
- 2014 Certificate of participation on the swimming competition " $1^a$  Braçada" + "Taínha Graúda" by Piscinas Municipais de Vila do Conde.
- 2014 My class was part of the top-3 for the Turma+ (Class+) prize from Escola Secundária José Régio, Vila do Conde.
- 2014 Diploma of student of the Board of Value and Excellence (12<sup>th</sup> year), Escola Secundária José Régio, Vila do Conde GPA: 17.1 out of 20.0.
- 2012 Diploma of student of the Board of Excellence in terms of assiduity (10<sup>th</sup> year), Escola Secundária José Régio, Vila do Conde.
- 2011 Diploma of student of the Board of Value and Excellence ( $9^{th}$  year), Escola Secundária José Régio, Vila do Conde.
- 2011 Certificate of winning team on the 9<sup>a</sup> Edição do Dia Aberto by FEP Faculdade de Economia do Porto, Porto.
- 2011 Certificate of participation on the 9<sup>a</sup> Edição do Dia Aberto by FEP Faculdade de Economia do Porto, Porto.
- 2010 Diploma of participation on "Jornadas com Energia" by EDP Gás.
- 2009 Diploma of student of the Board of Excellence ( $7^{th}$  year), EB 2/3 Frei João, Vila do Conde.
- 2009 Diploma of participation in the experimental activities of "Magia 7", performed at EB 2/3 Frei João, Vila do Conde.
- 2008 Diploma of student of the Board of Value and Excellence ( $6^{th}$  year), EB 2/3 Frei João, Vila do Conde.
- 2006 Diploma in Basic Skills in Information Technologies by Escola Superior de Educação do Instituto Politécnico do Porto.
- 2006 Diploma of participation in the contest "Uma Aventura... Literária 2006" promoted by Editorial Caminho.

# Computer skills

Basic Web Security, Computer Systems Security.

Intermediate JavaScript, Prolog, PHP, HTML, CSS, Node.JS, LATEX, OpenOffice, Eclipse, Git, Docker, pfSense, Android, Xamarin, Computer Graphics, Constraint Programming, Distributed Systems.

Advanced C/C++, SQL, Java, Python, C#, .NET, Linux, Microsoft Windows, IP Networking.

# **Publications**

2019 João Filgueiras, Luís Barbosa, Gil Rocha, Henrique Lopes Cardoso, Luís Paulo Reis, João Pedro Machado, Ana Maria Oliveira (2019). "Complaint Analysis and Classification for Economic and Food Safety", in Proceedings of the Second Workshop on Economics and Natural Language Processing, ECONLP 2019, Hong Kong, November 4, 2019, Association for Computational Linguistics, pp. 5160.

2019 L. Barbosa, J. Filgueiras, G. Rocha, H. Lopes Cardoso, L. P. Reis, J. P. Machado, A. C. Caldeira, A. M. Oliveira (2019). "Automatic Identification of Economic Activities in Complaints", in Statistical Language and Speech Processing, 7th International Conference, SLSP 2019, Ljubljana, Slovenia, October 14-16, 2019, Springer LNAI 11816, pp. 249-260.

2019 Jorge Ferreira, Pedro Lima, Luís Barbosa (2019). "Self-driving cars: a benefit to society?", in Proceedings of the 7th edition of the Talk a Bit conference, Talk a Bit 2019, Porto, Portugal, January 26, 2019.

# Languages

Portuguese Mothertongue

English Intermediate

French Basic

Conversationally fluent Basic words and phrases only

#### Interests

- Swimming

- Running

- Computer programming

- Cooking

- Singing/Karaoke

- Listening to music

- Do it yourself

- Cycling

- Driving

- Movies/Video editing

- Photography

- Stand-up comedy

- Reading

- Traveling

Last updated: August 18, 2020 github.com/LuisVilarBarbosa/Curriculum-Vitae