# Gil Rocha

# Curriculum Vitae

Porto, Portugal

☑ gilrocha93@gmail.com

② gilrocha.github.io
③ GilRocha
③ gilrocha93
☑ GilRocha

#### Education

2011–2016 Integrated Master in Informatics and Computing Engineering (300 ECTS)

(B.Sc. and Faculty of Engineering, University of Porto, Portugal

M.Sc.) Master Thesis: ArgMine: Argumentation Mining from Text
Advisors: Prof. Henrique Lopes Cardoso and Jorge Teixeira

2015–2016 Erasmus+ Programme, 1st semester 2015/2016

Barcelona School of Informatics, Technical University of Catalunia and Faculty of Mathematics, University of Barcelona, Spain

2017–2022 Doctoral Program in Informatics Engineering (ProDEI)

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

Title: Argumentation Mining from Text Using Semantic Approaches, Advisor: Prof. Henrique Lopes Cardoso

# Work Experience

09/2014- Web Development JCRSoft Paços de Ferreira, Porto, Portugal

08/2015 JCRSoft is a software company responsible for the IT sector of some companies from different industrial sectors. I was responsible for the full development of the comercial websites for some of these companies.

10/2016- Research Assistant Artificial Intelligence and Computer Science Laboratory, LIACC/FEUP, Portugal

Current LIACC is recognized as one the leading Portuguese research institutes on Artificial Intelligence. I have been working in the project entitled "ArgMine: Argumentation Mining from Text" which aims to develop a system able to automatic detect, identify and structure the argumentative content from textual resources written in Portuguese.

04/2018– **Visiting Researcher** Ubiquitous Knowledge Processing (UKP) Lab Department of Computer Science, Technische 06/2018 Universität Darmstadt, Germany

Research visit partially supported by an Erasmus+ (Work) grant. During this period, I collaborated with the UKP lab on the topic of Argumentation Mining, under the supervision of Dr. Christian Stab and Prof. Iryna Gurevych.

# Academic & Research Experience

#### Research Projects

11/2014- ArgMine: Argumentation Mining from Text, Artificial Intelligence and Computer Science Labo-09/2015 RATORY (LIACC/FEUP) & SAPO Labs, Porto, Portugal, .

07/2017- ARGH: Argumentation Hub, University of Porto Media Innovation Labs, Porto, Portugal. Current

05/2018- IA.SAE: Artificial Intelligence in Economic and Food Safety,

10/2019 National Digital Skills Initiatives (INCoDe.2030), LIACC/FEUP, PORTUGUESE ECONOMIC AND FOOD SAFETY AUTHORITY (ASAE), .

10/2018- DARGMINTS: Discourse Analysis and Argumentation Mining from Text Sources,

 $09/2021 \quad \textit{FCT POCI-01-0145-FEDER-031460}, \ \text{LIACC/FEUP}, \ \text{FLUP}, \ \text{INESC-ID LISBOA}, \ \ .$ 

#### Teaching

03/2015- Supervisor of Artificial Intelligence undergraduate course,

06/2015 FACULTY OF ENGINEERING, UNIVERSITY OF PORTO, Portugal.

09/2019- Invited Assistant Lecturer - Integrated Master in Informatics and Computing Engineering,

02/2020 DEPARTMENT OF INFORMATICS ENGINEERING (DEI), FACULTY OF ENGINEERING, UNIVERSITY OF PORTO (FEUP), Portugal.

Invited Assistant Lecturer on Agents and Distributed Artificial Intelligence

09/2016- Supervision of MSc Students, Department of Informatics Engineering (DEI), Faculty of Engineering, University of Porto (FEUP), Portugal.

Supervision of >10 students in topics related to: Artificial Intelligence, Natural Language Processing, and Machine Learning.

#### Scientific Events

#### Member of Programme Committees and Reviewer:.

ISMIS 2017; WI 2017; IEEE S3C 2017; NAACL 2019, 2021; ACL 2019, 2020, 2021<sup>‡</sup>; EMNLP 2020<sup>‡</sup>, 2021; AACL-IJCNLP 2020; EACL 2021; \*SEM 2021; Elsevier ESWA International Journal. (<sup>‡</sup> Outstanding Reviewer recognition)

#### Member of Organization Committees:

DSIE'17 (January 31, 2017); Workshop ArgHumantation – Research and Practice(s) of Argumentation, Argumentation Hub (ARGH), Media Innovation Labs (MIL), University of Porto (May 3, 2018);

#### Invited Talks

- 10/2017 Challenges in Natural Language Processing: From Semantic Tasks to Argumentation Mining. Faculty of Letters, University of Porto, Portugal. JADIS VII / MEMITA
- 06/2018 Argumentation Mining from Text. Smart Data Analytics (SDA), University of Bonn, Germany.
- 11/2017, **ArgMine: Argumentation Mining from Text.** Faculty of Engineering, University of Porto, Portugal. 10/2018
- 11/2019 Learning Text Representations. Faculty of Engineering, University of Porto, Portugal.

### Selected Publications

- 1. <u>Gil Rocha</u> and Henrique Lopes Cardoso. **Recognizing Textual Entailment: Challenges in the Portuguese Language**. Information 2018, 9(4):76.
- 2. <u>Gil Rocha, Christian Stab, Henrique Lopes Cardoso and Iryna Gurevych.</u> **Cross-Lingual Argumentative Relation Identification: from English to Portuguese**. 5th Workshop on Argumentation Mining, EMNLP, ACL. 2018.
- 3. André Cruz, Gil Rocha and Henrique Lopes Cardoso. On Document Representations for Detection of Biased News Articles. 35th ACM/SIGAPP Symposium on Applied Computing, KLP-SAC, ACM. 2020
- 4. André Cruz, Gil Rocha and Henrique Lopes Cardoso. Coreference Resolution: Toward End-to-End and Cross-Lingual Systems. Information. 2020; 11(2):74
- 5. <u>Gil Rocha</u> and Henrique Lopes Cardoso. **Improving Transfer Learning in Unsupervised Language Adaptation**. 30th International Conference on Artificial Neural Networks and Machine Learning, ICANN 2021.
- 6. <u>Gil Rocha</u> and Henrique Lopes Cardoso. **Towards Robust Auxiliary Tasks for Language Adaptation**. 29th European Symposium on Artificial Neural Networks, ESANN 2021.

## Honors and Awards

- 10/2019 EurNLP Travel grant, EURNLP, FACEBOOK LONDON, London, UK.
- 09/2018 **PhD Scholarship**, FUNDAÇÃO PARA A CIÊNCIA E TECNOLOGIA (FCT), SFRH/BD/140125/2018, Portugal. Very competitive scholarships: Ranked in the top 10% among more than 100 candidates in the field of Computer Science
- 09/2018 **ProDEI PhD Scholarship**, DOCTORAL PROGRAM IN INFORMATICS ENGINEERING (PRODEI), Department of Informatics Engineering (DEI), Faculty of Engineering, University of Porto (FEUP), Portugal.
- 07/2017 29th European Summer School in Logic, Language and Information (ESSLLI), France.
- 02/2016 9th Young Researchers Meeting of the University of Porto (IJUP), Porto, Portugal.
- 07/2015 5th Lisbon Machine Learning School (LxMLS) Travel grant, Lisbon, Portugal.
- 03/2013 EBEC Porto (Team Design category) First Place, BEST PORTO, Portugal.
- 04/2013 EBEC Portugal (Team Design category) First Place, BEST Portugal, Portugal.
- 08/2013 EBEC Final (Team Design category) Second Place, BEST WARSAW, Poland.

## Skills and Languages

General Computer Science, Mathematics, Software Engineering, Artificial Intelligence, Multi-Agent Systems, Machine Learning, Natural Language Processing.

Programming Java, Python, SQL, MongoDB, JADE, Prolog, scikit-learn, NumPy, SciPy, Pandas, CRFsuite, PyStruct, CRF++, TensorFlow, Keras, PyTorch

Languages Portuguese (Native), English (Fluent), French (Fluent), Spanish (Advanced)

## Research Interests

Machine Learning, Natural Language Processing, Argumentation Mining, Computational Semantics, Transfer Learning, Cross-Language Learning, Knowledge Representation and Reasoning, and Multi-Agent Systems.