Thales **Bertaglia**

PHD CANDIDATE · MAASTRICHT UNIVERSITY

✉ thalesbertaglia@gmail.com | 🏠 thalesbertaglia.com | 🐱 thalesbertaglia | 💼 thales-bertaglia

Professional Experience

Maastricht University   *Maastricht, the Netherlands*

PHD CANDIDATE   *Jan. 2020 - PRESENT*

- Working on social media analysis.
- Joint PhD with the Insitute of Data Science and Studio Europa.

Microsoft   *Munich, Germany*

APPLIED DATA SCIENTIST INTERN   *Jun. 2019 - Dec. 2019*

- Member of the Microsoft Search Technology Center.
- Worked on Intelligent Search, exploring approaches for improving search relevance for Microsoft Teams.

Amazon   *Cambridge, United Kingdom*

SPEECH SCIENTIST INTERN   *Jul. 2018 - Jan. 2019*

- Member of the Natural Language Understanding Team for Alexa.
- Worked on Multilingual Transfer Learning for Intent Classification.
- Developed approaches for leveraging English data (highly available) to train models for under-resourced languages.

University of Sheffield   *Sheffield, United Kingdom*

STUDENT RESEARCHER   *Sep. 2017 - Jun. 2018*

- Conducted research on Multimodal Machine Translation under the supervision of Prof. Dr. Lucia Specia.
- Worked with deep learning architectures for NLP.

University of Sheffield   *Sheffield, United Kingdom*

TEACHING ASSISTANT   *Sep. 2017 - Jun. 2018*

- Teaching assistant for the modules: **Speech Processing**, **Machines and Intelligence** and **Natural Language Processing**.
- Responsible for helping the students during lab sessions and marking assignments.

Smart BR   *Cascavel, Brazil*

TESTING INTERN   *Sep. 2014 - Dec. 2014*

- Intern in the testing department, responsible for testing new functionalities of the system and revising the code.

Universidade Estadual do Oeste do Paraná   *Cascavel, Brazil*

TEACHING ASSISTANT   *Mar. 2012 - Aug. 2013*

- Teaching assistant for the modules: **Algorithms** and **Theory of Computation**.
- Responsible for helping the students during lab sessions and during classes.

Education

M.Sc. in Computer Science and Computational Mathematics – Natural Language Processing Program   *São Carlos, Brazil*

USP(UNIVERSIDADE DE SÃO PAULO)   *Mar. 2016 - Aug. 2017*

- Research topic: Textual normalization of user-generated content.
- Master's Degree Scholarship granted by the Brazilian Ministry of Education (CNPq).
- Thesis: User-generated Content Textual Normalization
- **Supervisor:** Prof. Dr. Maria das Graças Volpe Nunes

B.Sc. in Computer Science   *Cascavel, Brazil*

UNIOESTE(UNIVERSIDADE ESTADUAL DO OESTE DO PARANÁ)   *Feb. 2011 - Dec. 2015*

- One year exchange program at the Katholieke Universiteit Leuven, Belgium.
- Outstanding Student in 2015. Granted by the Brazilian Society for Computing.
- Best Computer Science Graduate of 2015. Granted by UNIOESTE.
- Bachelor thesis: Aspect Extraction-based Opinion Mining.
- **Supervisor:** Prof. Dr. Clodis Boscarioli

Skills

Programming	Python, C/C++, Java, C#
Frameworks	NumPy, Scikit-Learn, MXNet, PyTorch
Languages	Portuguese (native), English (fluent), Spanish (intermediate), German (basic)

Publications

PELESent: Cross-domain polarity classification using distant supervision

PROCEEDINGS OF THE 6TH BRAZILIAN CONFERENCE ON INTELLIGENT SYSTEMS *2017*

Exploring Word Embeddings for Unsupervised Textual User-Generated Content Normalization

PROCEEDINGS OF THE 2ND WORKSHOP ON NOISY USER-GENERATED TEXT AT COLING *2016*

Opinion Mining and Sentiment Analysis: an overview

PROCEEDINGS OF THE 1ST ANNUAL MEETING ON SCIENCE, TECHNOLOGY AND INNOVATION AT UNIOESTE *2015*

The SIRC Model and the Dynamics of Influenza Transmission

PROCEEDINGS OF THE 5TH MEETING ON APPLIED COMPUTING AT UNIOESTE *2012*

Computational Implementation of the SIRC Model for Influenza A-H1N1 Transmission

PROCEEDINGS OF THE 21ST MEETING ON SCIENTIFIC INITIATION AT UEM *2012*

The SIRC Model and the Dynamics of Influenza A-H1N1 Transmission

PROCEEDINGS OF THE 4TH MEETING ON APPLIED COMPUTING AT UNIOESTE *2011*

Research Projects

Exploring Acoustic Cues for Machine Translation

RESEARCH PROJECT

United Kingdom

Sep. 2017 - Jul. 2018

- Scholarship granted by the Faculty of Engineering of the University of Sheffield. Project supervised by Prof. Dr. Lucia Specia.
- Exploring the use of acoustic information to improve Multimodal NLP tasks – mainly Machine Translation.
- Main technical approach: fusing acoustic and textual signals with deep neural networks.

User-generated Content Textual Normalization

MASTER'S PROJECT

Brazil

Mar. 2016 - Aug. 2016

- Scholarship granted by the Brazilian Ministry of Education (CNPq).
- Development of natural language processing methods and tools for normalization of user-generated content.
- Development of a tool, named **Enelvo**, for text normalization. The tool achieved state-of-the-art results for Brazilian Portuguese, outperforming previous methods by up to 40% accuracy. All resources are publicly available at `github.com/tfcbertaglia/enelvo`.

Opinion Mining and Sentiment Analysis

UNDERGRADUATE PROJECT

Brazil

Oct. 2014 - Oct 2015

- Tutorial Education Program Scholarship granted by the Brazilian Ministry of Education (MEC-SESU).
- Investigation of the theoretical and applied aspects of opinion mining, including the implementation of natural language processing methods.

Negative Correlation Learning and Neural Network Ensembles

UNDERGRADUATE PROJECT

Brazil

Oct. 2012 - Sep 2013

- Tutorial Education Program Scholarship granted by the Brazilian Ministry of Education (MEC-SESU).
- Investigation of negative correlation learning for training ensembles of neural networks.

Development and Integration of a Simulation Environment for Dengue Spreading

UNDERGRADUATE PROJECT

Brazil

Jan. 2012 - Oct 2012

- Institutional Scientific Initiation Scholarship granted by the Brazilian Ministry of Education (CNPq).
- Java implementation of network-based spreading models.

Computational Implementation of the SIRC Model for Influenza A-H1N1 Transmission

UNDERGRADUATE PROJECT

Brazil

Sep. 2011 - Jan 2012

- Institutional Scientific Initiation Scholarship granted by the Brazilian Ministry of Education (CNPq).
- C implementation of numerical methods for solving systems of differential equations for modeling Influenza transmission.

Awards & Scholarships

Awards

2018	**Postgraduate Researcher Experience Programme Award**, Granted by the University of Sheffield	*United Kingdom*
2015	**Best Computer Science Graduate of 2015**, Granted by Universidade Estadual do Oeste do Paraná	*Brazil*
2015	**Outstanding Student in 2015**, Granted by the Brazilian Society for Computing	*Brazil*

Scholarships

2017	**PhD Scholarship**, Doctoral Award Studentship granted by the Faculty of Engineering of the University of Sheffield	*United Kingdom*
2016	**Master's Degree Scholarship**, Granted by the Brazilian Ministry of Education (CNPq)	*Brazil*
2013	**Science Without Borders Undergraduate Scholarship**, Granted by the Brazilian Ministry of Education (CNPq)	*Belgium*
2012	**Tutorial Education Program (PET) Scholarship**, Granted by the Brazilian Ministry of Education (MEC-SESU)	*Brazil*
2011	**Institutional Scientific Initiation Scholarship**, Granted by the Brazilian Ministry of Education (CNPq)	*Brazil*

Other Activities

Review Activities

ACL 2019, HOW2 Challenge (ICML Workshop), EMNLP-IJCNLP 2019, AAAI2020, AAAI2021

Dagstuhl Seminar – Joint Processing of Language and Visual Data for Better Automated Understanding
Germany

Participant · *Jan. 2019*

- Participated as a student.

8th Lisbon Machine Learning School – LxMLS
Lisbon, Portugal

Monitor · *Jun. 2018*

- Participated as a monitor, helping students during lab sessions and contributing to the code base.
- Grant awarded by the school committee.

SUMMA – BBC News Labs Hackathon
London, United Kingdom

Participant · *Nov. 2017*

- Participated in the hackathon with a team of labmates.

7th Lisbon Machine Learning School – LxMLS
Lisbon, Portugal

Participant · *Jul. 2017*

- Participated as student.

1st Advanced School of Big Data Analysis
São Carlos, Brazil

Participant · *Jul. 2017*

- Participated as student.

V Brazilian Symposium on Computing Systems Engineering – SBESC
Foz do Iguaçu, Brazil

Student Volunteer · *Nov. 2015*

- Member of the staff as a student volunteer. Helped with the conference organization.

XIII Brazilian Symposium on Human Factors in Computer Systems – IHC'14
Foz do Iguaçu, Brazil

Student Volunteer · *Nov. 2015*

- Member of the staff as a student volunteer. Helped with the conference organization.

Teaching Coding to High School Students
Cascavel, Brazil

Teacher · *2013, 2015*

- A project focused on teaching basic coding to high school students from public schools.
- Responsible for elaborating and teaching classes, elaborating exercises, projects and exams, and marking them.

Coding Dojo: A Fun Way of Practicing
Cascavel, Brazil

Organizer · *2013, 2015*

- A project focused on helping first-year Computer Science students learn coding and algorithms.
- One of the organizers. Responsible for elaborating exercises and conducting the sessions.