

## PERSONAL INFORMATION

Laura Pérez-Mayos

📍 PhD Student in Natural Language Processing. UPF, Barcelona

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🌐 <https://lpmayos.github.io>

## ACADEMIC EDUCATION

2017 – 2021	<b>PhD on Natural Language Processing</b> <span>UPF</span> Universitat Pompeu Fabra, Barcelona, Spain Thesis title (provisional): In-depth exploration of the syntactic capabilities of modern language models for downstream applications
2019	<b>9th Lisbon Machine Learning School (LxMLS 2019)</b> <span>IST</span> Instituto Superior Técnico, Lisbon, Portugal ML and their application to NLP. These areas include but are not restricted to: Classification, Structured Prediction (sequences, trees, graphs), Deep Learning and Reinforcement Learning.
2015 – 2017	<b>Master on Computer Vision</b> <span>UAB, UPC, UPF, UOC (60 ECTS)</span> Universitat Autònoma de Barcelona, Universitat Politècnica de Catalunya, Universitat Pompeu Fabra, Universitat Oberta de Catalunya, Barcelona, Spain Thesis title: Improving the quality of video-to-language models by an optimized annotation of the training material
2014 – 2015	<b>Master on Intelligent Interactive Systems</b> <span>UPF (60 ECTS)</span> Universitat Pompeu Fabra, Barcelona, Spain Thesis title: Co-speech gesture generation for the humanoid robot REEM-C
2001 – 2005	<b>Technical Engineer in Computer Science</b> <span>UPC (183.6 ECTS)</span> Universitat Politècnica de Catalunya, Barcelona, Spain Thesis title: Theclick production guide, visual directory of companies

## PROFESSIONAL EXPERIENCE

October 2017 – Present	<b>NLP Pre-doctoral Researcher</b> <a href="http://taln.upf.edu">http://taln.upf.edu</a> Syntactic capabilities of modern language models. Web development for workshops and projects. Social media management.
July 2015 – September 2017	<b>NLP Research assistant at TALN, UPF</b> <a href="http://taln.upf.edu">http://taln.upf.edu</a> Word Sense Disambiguation. UIMA pipelines. Web development for workshops and projects.
May 2014 – September 2014	<b>Web Architect at 4d-life</b> <a href="http://4d-life.net">http://4d-life.net</a> Frontend and Backend Engineer. Analysis, architecture and development of web applications with Python and Javascript.
March 2013 – February 2014	<b>CTO at Iskra Desenvolupament S.C.C.L.</b> <a href="http://www.iskra.cat">http://www.iskra.cat</a> Agile leader and project manager. Analysis, design and development of web applications with Python and Plone.

March 2010 – January 2013

#### Web applications developer at UPCnet Inc.

<http://www.upcnet.es>

Analysis, design and development of web applications with Python and Plone. Analysis, design and development of e-Government applications.

February 2008 – August 2009

#### Web applications developer at Guell Consulting Technologies Inc.

<http://www.guellconsulting.com>

Analysis, design and development of web applications with Python and Plone.

February 2006 – January 2008

#### Web developer at SAC Disseny i Comunicacions Inc.

<http://activaweb.com>

Analysis, design and development of web applications based on ASP / MySQL implementation of own content manager.

### RESEARCH INTERESTS

Syntactic capabilities of modern language models.

Deep Learning for natural language processing.

Natural language processing for social good.

### PUBLICATIONS

2021 Pérez-Mayos, Laura; Carlini, Roberto; Ballesteros, Miguel; Wanner, Leo. On the evolution of syntactic information encoded by BERT's contextualized representations. In proceedings of the European Chapter of the Association for Computational Linguistics (EACL 2021). Kyiv, Ukraine.

2019 Pérez-Mayos, Laura; Farrús, Mireia; Adell, Jordi. Part-of-Speech and Prosody-based Approaches for Robot Speech and Gesture Synchronization. Journal of Intelligent & Robotic Systems. <https://doi.org/10.1007/s10846-019-01100-3>

2018 Pérez-Mayos, Laura; Sukno, Federico M.; Wanner, Leo. Improving the Quality of Video-to-Language Models by Optimizing Annotation of the Training Material. International Conference on Multimedia Modeling. 1 ed. Bangkok: Cham Springer International; 2018. p. 279-290.

### ACADEMIC SERVICES

Web Chair for COLING 2020.

Reviewer for COLING, EMNLP, EACL.

Secondary reviewer for NAACL-HLT 2019.

### UNIVERSITY TEACHING

Teaching assistant in the Computational Logic subject of the Computer Science Degree. DTIC. Universitat Pompeu Fabra, Barcelona, Spain. Academic year: 2014-2015.

### INVITED TALKS

TALN Research Seminar (Universitat Pompeu Fabra, Barcelona, Spain). Host: Monica Domínguez. 9th Sep 2020. Topic: On the evolution of syntactic information encoded by BERT's contextualized representations.

TALN Research Seminar (Universitat Pompeu Fabra, Barcelona, Spain). Host: Monica Domínguez. 12th Dec 2018. Topic: Jupyter Notebook by example. Basic NLP with spaCy.

## COMMUNITY

### PyBCN

President of PyBCN, the Barcelona Python Association, with more than 3k members on Meetup. Our mission is to promote, educate and advance the local Python community through monthly meetups, practice sessions and specific events like PyDay and PyData.

### PyLadiesBCN

Coordinator of PyLadiesBCN. Our mission is to promote, educate and advance a diverse Python community through outreach, education, conferences and events.

## LANGUAGES

### Mother tongue(s)

Catalan and Spanish

### Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1
German	A2	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user  
Common European Framework of Reference (CEF) level

## PERSONAL SKILLS

### Computing

Linux, OSX. Python, Java, Matlab. ROS. Neo4j, OrientDB, Solr, Mongo. HTML, CSS, JS.

### Scuba diving

SSI Stress & Rescue diver. 2020. Barcelona.  
SSI React Right. 2020. Barcelona.  
PADI Advanced Open Water Certificate. 2018. Thailand.  
PADI Open Water Certificate. 2016. Barcelona.

### Interests

Books. Oceans. Mountains. Photography. Cycling.