



Pedro Ortiz Suarez

POSTDOCTORAL RESEARCHER

✉ pedro@portiz.eu | 🏠 portiz.eu | 📧 pjo | 📧 pjo | 📧 pjo | 📧 @pjo13 | 📧 Pedro Ortiz Suarez | 📧 Pedro Ortiz Suarez | 📞 0000-0003-0343-8852 | 📍 Pedro Ortiz Suarez | 📍 Pedro Ortiz Suarez | 📍 Pedro Ortiz Suarez

Research

PH.D. THESIS

Sorbonne Université - Inria - ALMAnaCH Team

Paris, France

PH.D. IN COMPUTER SCIENCE

Oct. 2018 - Jun. 2022

Topic: A Data-driven Approach to Natural Language Processing for Contemporary and Historical French

Advisers: Laurent Romary and Benoît Sagot

JOURNAL PUBLICATIONS

- Quality at a Glance: An Audit of Web-Crawled Multilingual Datasets.** Julia Kreutzer, Isaac Caswell, Lisa Wang, Ahsan Wahab, Daan van Esch, Nasanbayar Ulzii-Orshikh, Allahsera Tapo, Nishant Subramani, Artem Sokolov, Claytone Sikasote, Monang Setyawan, Supheakmungkol Sarin, Sokhar Samb, Benoît Sagot, Clara Rivera, Annette Rios, Isabel Papadimitriou, Salomey Osei, [Pedro Ortiz Suarez](#), Iroro Orife, Kelechi Ogueji, Andre Niyongabo Rubungo, Toan Q. Nguyen, Mathias Müller, André Müller, Shamsuddeen Hassan Muhammad, Nanda Muhammad, Ayanda Mnyakeni, Jamshidbek Mirzakhalov, Tapiwanashe Matangira, Colin Leong, Nze Lawson, Sneha Kudugunta, Yacine Jernite, Mathias Jenny, Orhan Firat, Bonaventure F. P. Dossou, Sakhile Dlamini, Nisansa de Silva, Sakine Çabuk Ballı, Stella Biderman, Alessia Battisti, Ahmed Baruwa, Ankur Bapna, Pallavi Baljekar, Israel Abebe Azime, Ayodele Awokoya, Duygu Ataman, Orevaoghene Ahia, Oghenefego Ahia, Sweta Agrawal, Mofetoluwa Adeyemi. *Transactions of the Association for Computational Linguistics*, volume 10, 2022.

CONFERENCE PUBLICATIONS

- A Data-driven Approach to Named Entity Recognition for Early Modern French.** [Pedro Ortiz Suarez](#) and Simon Gabay. *The 29th International Conference On Computational Linguistics (COLING 2022)*, Oct 2022, Gyeongju, Republic of Korea.
- BERTrade: Using Contextual Embeddings to Parse Old French.** Loïc Grobol, Mathilde Regnault, [Pedro Ortiz Suarez](#), Benoît Sagot, Laurent Romary and Benoît Crabbé. *13th International Conference on Language Resources and Evaluation (LREC 2022)*, May 2022, Marseille, France.
- From FreEM to D'AleMBERT: a Large Corpus and a Language Model for Early Modern French.** Simon Gabay, [Pedro Ortiz Suarez](#), Alexandre Bartz, Alix Chagué, Rachel Bawden, Philippe Gambette, Benoît Sagot. *13th International Conference on Language Resources and Evaluation (LREC 2022)*, May 2022, Marseille, France.
- Towards a Cleaner Document-Oriented Multilingual Crawled Corpus.** Julien Abadji, [Pedro Ortiz Suarez](#), Laurent Romary and Benoît Sagot. *13th International Conference on Language Resources and Evaluation (LREC 2022)*, May 2022, Marseille, France.
- Ungoliant: An Optimized Pipeline for the Generation of a Very Large-Scale Multilingual Web Corpus.** Julien Abadji, [Pedro Javier Ortiz Suárez](#), Laurent Romary and Benoît Sagot. *Proceedings of the Workshop on Challenges in the Management of Large Corpora (CMLC-9)*, Jul 2021, Leibniz-Institut für Deutsche Sprache, Online.
- SinNer@Clef-Hipe2020 : Sinful adaptation of SotA models for Named Entity Recognition in French and German.** [Pedro Javier Ortiz Suárez](#), Yoann Dupont, Gaël Lejeune, Tian Tian. *Working Notes of CLEF 2020 - Conference and Labs of the Evaluation Forum*, Sep 2020, CEUR-WS, Thessaloniki / Virtual, Greece.
- A Monolingual Approach to Contextualized Word Embeddings for Mid-Resource Languages.** [Pedro Javier Ortiz Suárez](#), Benoît Sagot, Laurent Romary. *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, Jul 2020, Association for Computational Linguistics, Online.
- CamemBERT: a Tasty French Language Model.** Louis Martin^{*}, Benjamin Muller^{*}, [Pedro Javier Ortiz Suárez](#)^{*}, Yoann Dupont, Laurent Romary, Éric de la Clergerie, Djamel Seddah, Benoît Sagot. *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, Jul 2020, Association for Computational Linguistics, Online.
- Building a User-Generated Content North-African Arabizi Treebank: Tackling Hell.** Djamel Seddah, Farah Essaidi, Amal Fethi, Matthieu Futral, Benjamin Muller, [Pedro Javier Ortiz Suárez](#), Benoît Sagot, Abhishek Srivastava. *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, Jul 2020, Association for Computational Linguistics, Online.
- Les modèles de langue contextuels Camembert pour le Français: impact de la taille et de l'hétérogénéité des données d'entraînement.** Louis Martin^{*}, Benjamin Muller^{*}, [Pedro Javier Ortiz Suárez](#)^{*}, Yoann Dupont, Laurent Romary, Éric de la Clergerie, Djamel Seddah, Benoît Sagot. *27e conférence sur le Traitement Automatique des Langues Naturelles (TALN 2020)*, Jun 2020, Nancy, France.
- Establishing a New State-of-the-Art for French Named Entity Recognition.** [Pedro Javier Ortiz Suárez](#), Yoann Dupont, Benjamin Muller, Laurent Romary, Benoît Sagot. *12th International Conference on Language Resources and Evaluation (LREC 2020)*, May 2020, Marseille, France.
- French Contextualized Word-Embeddings with a sip of CaBeRnet: a New French Balanced Reference Corpus.** Murielle Popa-Fabre, [Pedro Javier Ortiz Suárez](#), Benoît Sagot, Éric de la Clergerie. *8th Workshop on the Challenges in the Management of Large Corpora (CMLC-8)*, May 2020, Marseille, France.
- How OCR Performance can Impact on the Automatic Extraction of Dictionary Content Structures** Mohamed Khemakhem, Ioana Galleron, Geoffrey Williams, Laurent Romary, [Pedro Javier Ortiz Suárez](#). *19th annual Conference and Members' Meeting of the Text Encoding Initiative Consortium (TEI) -What is text, really? TEI and beyond*, Sep 2019, Graz, Austria.
- Asynchronous Pipelines for Processing Huge Corpora on Medium to Low Resource Infrastructures.** [Pedro Javier Ortiz Suárez](#), Benoît Sagot, Laurent Romary. *7th Workshop on the Challenges in the Management of Large Corpora (CMLC-7)*, Jul 2019, Cardiff, United Kingdom. ^{*}Equal contribution.

PUBLISHED SOFTWARE AND CORPORA

- **OSCAR**: The Open Super-large Crawled Aggregated coRpus is a huge multilingual corpus obtained by language classification and filtering of the Common Crawl corpus using the Ungoliant architecture
- **CamemBERT**: A state-of-the-art language model for French based on the RoBERTa architecture and pretrained on the French subcorpus of the OSCAR corpus
- **FrELMo**: A language model for French based on the ELMo architecture and pretrained on the French subcorpus of the OSCAR corpus
- **Ungoliant**: A high-performance pipeline that provides tools to build a multilingual corpus from CommonCrawl. It is the current pipeline for the OSCAR corpus
- **Goclassy**: The original pipeline for buiding the OSCAR corpus, later replaced by Ungoliant

REVIEWING EXPERIENCE

- ACL 2020, COLING 2020, EAACL 2021, ACL 2021, EMNLP 2021, CHR 2021, ARR October 2021, ARR November 2021, JMDHD, ARR July 2022, EMNLP 2022, NEJLT.

RESEARCH EXPERIENCE

Universität Mannheim - Data and Web Science Group

Mannheim, Germany

POSTDOCTORAL RESEARCHER

Mar. 2022 - Present

- Continued the development of the OSCAR corpus
- Production of new multilingual resources for NLP and web-based applications
- Teaching and project coaching

Inria - ALMAnaCH Team

Paris, France

PH.D. STUDENT

Oct. 2018 - Feb. 2022

- Research in language modeling for contemporary and historical French
- Created and managed the OSCAR project
- Research in sequence tagging for contemporary and historical texts

Inria - ALMAnaCH Team

Paris, France

INTERN

Apr. 2018 - Sep. 2018

- Worked on a project with the Ministry of Work of France (Dares)
- Research in text mining and data extraction for enterprise contracts

Institut de Mathématiques de Marseille, I2M

Marseille, France

INTERN

Apr. 2017 - Jun. 2017

- Research internship in Complex Algebraic Geometry and Canonical Surfaces

Teaching

Universität Mannheim

Mannheim, Germany

LECTURER

Mar. 2022 - Present

- Information Retrieval 2022, Lectures
- Introduction to Data science 2022, Lectures
- Web Mining 2022, Lectures
- Team Projects 2022, Coaching

Sorbonne Université

Paris, France

GRADUATE TEACHING ASSISTANT

Sep. 2019 - Jun. 2021

- Discrete Mathematics, Tutorials 81h
- Eléments de programmation 2, Tutorials 30h
- Worked with interactive tools to facilitate teaching during the Covid- 19 pandemic

Universidad Nacional de Colombia

Medellín, Colombia

TEACHING ASSISTANT DISCRETE MATHEMATICS

Aug. 2015 - Jun. 2016

- Discrete Mathematics, Tutorials 128h
- Worked in a constraint resource environment with groups of more than 120 students

Skills

Machine learning	NLP, PyTorch, Tensorflow, Tensorboard, Flair, spaCy, HF/Transformers, HF/Datasets (contributor), Fairseq
Programming	Go, Rust, Python, Java, C/C++, PHP, JavaScript, Shell, Matlab, Wolfram Mathematica
Tools & DevOps	TeX, Docker, Git, Apache Server, Mattermost, Grobid, MySQL, PostgreSQL, SQLite, MongoDB, bash, Raspberry Pi
Languages	Spanish (Native), English (Fluent), French (Fluent), German (Intermediary level)

Education

Sorbonne Université - Inria - ALMAnaCH Team

PH.D. IN COMPUTER SCIENCE

Lab: Inria Paris' NLP, ALMAnaCH project-team

Doctoral School: Ecole Doctorale Informatique, Télécommunications et Electronique. EDITE de Paris (ED130)

Funding: ANR-18-CE38-0003 BASNUM, public grant

Paris, France

Oct. 2018 - Jun. 2022

Université de Paris 8, Vincennes-Saint-Denis

B.A.SC. MATHEMATICS AND COMPUTER SCIENCE APPLIED TO HUMAN AND SOCIAL SCIENCES

• Minor in Linguistics

• GPA: 16.5/20.0

Saint-Denis, France

Nov. 2017 - Sep. 2018

Université d'Aix Marseille

M.SC. IN MATHEMATICS

Topic: Surfaces Canoniquement Plongées de Grands Degrés (Canonical Surfaces of High Degree)

Adviser: Xavier Roulleau

• Full scholarship granted by the LabEx Archimède

• GPA: 15.1/20.0

Marseille, France

Sep. 2016 - Jun. 2017

Universidad Nacional de Colombia

B.SC. IN MATHEMATICS

Topic: A Brief Introduction to Arithmetic Geometry

Adviser: Juan Diego Vélez Caicedo

• Admitted with honors, third place on the admission test

• GPA: 4.2/5.0

Medellín, Colombia

Jan. 2012 - Jun. 2016

Talks

29/03/2022	Data and Web Science Group Colloquium , A Data-driven Approach to Natural Language Processing for Contemporary and Historical French	Universität Mannheim, Germany
03/12/2021	Workshop en Philologie computationnelle: au delà de l'encodage du texte , Reconnaître les entités nommées	Université de Genève, Switzerland
23/11/2021	Séminaires du Master Sciences du Langage , Les Modèles de Langue pour le Français Contemporain et Historique	Université Paris Nanterre, France
29/06/2021	Demo TALN , CANTAL – Formats et Chaînes de traitement de TAL	Université de Lille, France
22/09/2020	Séminaires du Lattice , Des Méthodes de TAL modernes pour l'Enrichissement de Documents	ENS - Lattice, France
06/07/2020	58th Annual Meeting of the Association for Computational Linguistics , A Monolingual Approach to Contextualized Word Embeddings for Mid-Resource Languages	ACL 2020, Online
22/07/2019	7th Workshop on the Challenges in the Management of Large Corpora , Asynchronous Pipelines for Processing Huge Corpora on Medium to Low Resource Infrastructures	Cardiff University, UK
13/06/2019	10th International Conference on Historical Lexicography and Lexicology , Preparing the Dictionnaire Universel for Automatic Enrichment	Fryske Akademy, Netherlands
24/03/2019	GIG #3 : bring the cool back in the cloud , Reducing computation time by months by rewriting Bash scripts in Go	Golang Meeting Paris, France

Miscellaneous

PROJECT MANAGEMENT

2019-now	OSCAR Project Coordination , Head of the OSCAR project, supervision of a research engineer	OSCAR Project
2021-now	Big Science Area Chair and Founding Member , Area chair of the Big Science Data Sourcing Working Group and founding member of the workshop	Big Science

WEBSITE AND INFRASTRUCTURE ADMINISTRATION

2019-now	OSCAR Project Website , oscar-corpus.com	ALMAnaCH team
2018-now	Administration of the Inria ALMaNACH team Mattermost server , traces1.inria.fr/mattermost/	ALMAnaCH Team
2020	CamemBERT Project Website , camembert-model.fr	ALMAnaCH team

VOLUNTEERING

2020	Participant in the Mission Covid-19 supporting the AP-HP , Installation of Grobid and entity-fishing on the AP-HP (Paris hospitals) infrastructure during the COVID-19 quarantine in France	Mission Covid-19
------	--	------------------

OUTREACH

Oct. 2019 **Mentor at the RJMI at Inria Paris**, Young Women Maths/Computer Science Days

Inria Paris

Honors & Awards

2016-2017 **Full master scholarship**, Granted by the LabEx Archimède for academic excellence

Marseille, France

2012 **Tuition payment exemption**, Top 15 of class, Granted by the Science Faculty Council, Universidad Nacional de Colombia, second academic period

Medellín, Colombia

2012 **Tuition with honors**, Top 5 of class, Granted by the Science Faculty Council, Universidad Nacional de Colombia, first academic period

Medellín, Colombia