Florian Boudin

Last update: November 7, 2024

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EMPLOYMENT	Associate Professor	2011 to present
HISTORY	Nantes Université, France	2011 to present
	Assistant Professor	2010-2011
	Université d'Avignon et des Pays de Vaucluse, France	
	Postdoctoral Fellow	2009-2010
	Université de Montréal, Canada	
	Research Assistant	2006-2009
	Université d'Avignon et des Pays de Vaucluse, France	
EDUCATION	Habilitation à Diriger des Recherches	2023
	Nantes Université, France	
	Ph.D. in Computer Science	2006-2008
	Université d'Avignon et des Pays de Vaucluse, France	
	Advisors: Juan-Manuel Torres-Moreno, Marc El-Bèze	
	M.S. in Computer Science	2004-2006
	Université d'Avignon et des Pays de Vaucluse, France	
	B.S. in Mathematics and Computer Science	2000-2004
	Université d'Avignon et des Pays de Vaucluse, France University of Birmingham, UK (ERASMUS Programn	
	Offiversity of Diffillingham, OK (ERASWOS Flogramm	ile)
Awards and	CNRS research leave (délégation) for 24 months	2023-2025
Honors	JFLI / National Institute of Informatics (NII), Tokyo	
	Prime d'Encadrement Doctoral et de Recherche	2017-2021
	Bonus for doctoral supervision and research activity	
	Atlanstic 2020 sabbatical grant for 6 months	2019
	National Institute of Informatics (NII), Tokyo	
CTUDENTO	Dh. D. Chu dan ta	
STUDENTS	Ph.D. Students→ Julien Aubert-Béduchaud (expected graduation ~	2027)
	 ≻ Léane Jourdan (expected graduation ~ 2026) 	2027)
	 → Maël Houbre (expected graduation ~ 2025) 	
	> Ygor Gallina (2022; now assistant professor at Nar	ntes University)
	> Adrien Bougouin (2015; now software engineer at	WOVN.io)
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Publications	In Natural Language Processing and Information Retr	-
	more highly regarded, and more highly cited than jou	mais.

Top-tier NLP/IR conferences: ACL (1 paper), NAACL-HLT (4 papers), EMNLP (3 papers), COLING (4 papers), ECIR (2 papers) and JCDL (3 papers). According to Google Scholar, my five most cited papers are: [27] (569 citations), [19] (274 citations), [6] (216 citations), [25] (186 citations) and [26] (107 citations).

Journal Papers

- [1] Kenichi Iwatsuki, Florian Boudin, and Akiko Aizawa. Extraction and evaluation of formulaic expressions used in scholarly papers. *Expert Systems with Applications*, 187. 2022.
- [2] Adrien Bougouin, Florian Boudin, and Béatrice Daille. Modélisation à base de graphe pour l'indexation en domaines de spécialité. *Recherche d'information, document et web sémantique*, 17:1. 2017.
- [3] Adrien Bougouin, Florian Boudin, Béatrice Daille, Sabine Barreaux, Damien Cram, and Amir Hazem. Indexation d'articles scientifiques Présentation et résultats du défi fouille de textes DEFT 2016. *Recherche d'information, document et web sémantique*, 17:1. 2017.
- [4] Adrien Bougouin and Florian Boudin. TopicRank: ordonnancement de sujets pour l'extraction automatique de termes-clés. *Traitement Automatique des Langues*, 55:1. 2014.
- [5] Romain Deveaud and Florian Boudin. De quoi parle ce Tweet? Résumer Wikipédia pour contextualiser des microblogs. *The Information Intelligence Interaction (13) Journal*. 2014.
- [6] Florian Boudin, Jian-Yun Nie, Joan Bartlett, Roland Grad, Pierre Pluye, and Martin Dawes. Combining classifiers for robust PICO element detection. *BMC Medical Informatics and Decision Making*, 10:29. 2010.

Conference Papers

- [7] Florian Boudin and Akiko Aizawa. Unsupervised Domain Adaptation for Keyphrase Generation using Citation Contexts. *Conference on Empirical Methods in Natural Language Processing (EMNLP) Findings*. 2024.
- [8] Léane Jourdan, Florian Boudin, Nicolas Hernandez, and Richard Dufour. CASIMIR: A Corpus of Scientific Articles Enhanced with Multiple Author-Integrated Revisions. *Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*. 2024.
- [9] <u>Maël Houbre</u>, Florian Boudin, Béatrice Daille, and Akiko Aizawa. Self-Compositional Data Augmentation for Scientific Keyphrase Generation. *Joint Conference on Digital Libraries (JCDL)*. 2024.
- [10] Amir Hazem, Mérieme Bouhandi, Florian Boudin, and Béatrice Daille. Cross-lingual and Cross-domain Transfer Learning for Automatic Term Extraction from Low Resource Data. *Language Resources and Evaluation Conference (LREC)*. 2022.
- [11] Rui Meng, Debajan Mahata, and Florian Boudin. From Fundamentals to Recent Advances: A Tutorial on Keyphrasification. *European Conference on Information Retrieval (ECIR)*. 2022.
- [12] Florian Boudin. ACM-CR: A Manually Annotated Test Collection for Citation Recommendation. *Joint Conference on Digital Libraries (JCDL)*. 2021.
- [13] Florian Boudin and Ygor Gallina. Redefining Absent Keyphrases and their Effect on Retrieval Effectiveness. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT). 2021.
- [14] Florian Boudin, Béatrice Daille, Evelyne Jacquey, and Jian-Yun Nie. The DELICES Project: Indexing Scientific Literature Through Semantic Expansion. *Joint Conference of the Information Retrieval Communities in Europe (CIRCLE)*. 2020.
- [15] Florian Boudin, Ygor Gallina, and Akiko Aizawa. Keyphrase Generation for Scientific Document Retrieval. *Association for Computational Linguistics (ACL)*. 2020.
- [16] Ygor Gallina, Florian Boudin, and Béatrice Daille. Large-Scale Evaluation of Keyphrase Extraction Models. *Joint Conference on Digital Libraries (JCDL)*. 2020.
- [17] Kenichi Iwatsuki, Florian Boudin, and Akiko Aizawa. An Evaluation Dataset for Identifying Communicative Functions of Sentences in English Scholarly Papers. *Language Resources and Evaluation Conference (LREC)*. 2020.

- [18] Ygor Gallina, Florian Boudin, and Béatrice Daille. KPTimes: A Large-Scale Dataset for Keyphrase Generation on News Documents. *International Conference on Natural Language Generation (INLG)*. 2019.
- [19] Florian Boudin. Unsupervised Keyphrase Extraction with Multipartite Graphs. *Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT)*. 2018.
- [20] Florian Boudin. pke: an open source python-based keyphrase extraction toolkit. *International Conference on Computational Linguistics (COLING)*. 2016.
- [21] Adrien Bougouin, Sabine Barreaux, Laurent Romary, Florian Boudin, and Béatrice Daille. TermITH-Eval: a French Standard-Based Resource for Keyphrase Extraction Evaluation. Language Resources and Evaluation Conference (LREC). 2016.
- [22] Adrien Bougouin, Florian Boudin, and Béatrice Daille. Keyphrase Annotation with Graph Co-Ranking. *International Conference on Computational Linguistics (COLING)*. 2016.
- [23] Florian Boudin, Hugo Mougard, and Benoit Favre. Concept-based Summarization using Integer Linear Programming: From Concept Pruning to Multiple Optimal Solutions. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*. 2015.
- [24] Ophélie Lacroix, Denis Béchet, and Florian Boudin. Label Pre-annotation for Building Non-projective Dependency Treebanks for French. Conference on Intelligent Text Processing and Computational Linguistics (CICLing). 2014.
- [25] Florian Boudin. A Comparison of Centrality Measures for Graph-Based Keyphrase Extraction. *International Joint Conference on Natural Language Processing (IJCNLP)*. 2013.
- [26] Florian Boudin and Emmanuel Morin. Keyphrase Extraction for N-best Reranking in Multi-Sentence Compression. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT). 2013.
- [27] Adrien Bougouin, Florian Boudin, and Béatrice Daille. TopicRank: Graph-Based Topic Ranking for Keyphrase Extraction. *International Joint Conference on Natural Language Processing (IJCNLP)*. 2013.
- [28] Florian Boudin, Jian-Yun Nie, and Martin Dawes. Using a Medical Thesaurus to Predict Query Difficulty. *European Conference on Information Retrieval (ECIR)*. 2012.
- [29] Florian Boudin, Stéphane Huet, and Juan-Manuel Torres-Moreno. A Graph-based Approach to Cross-language Multi-document Summarization. *Conference on Intelligent Text Processing and Computational Linguistics (CICLing)*. 2011.
- [30] Florian Boudin, Jian-Yun Nie, and Martin Dawes. Clinical Information Retrieval using Document and PICO Structure. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT). 2010.
- [31] Florian Boudin, Jian-Yun Nie, and Martin Dawes. Positional Language Models for Clinical Information Retrieval. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*. 2010.
- [32] Florian Boudin, Lixin Shi, and Jian-Yun Nie. Improving Medical Information Retrieval with PICO Element Detection. *European Conference on Information Retrieval (ECIR)*. 2010.
- [33] Florian Boudin, Marc El-Bèze, and Juan-Manuel Torres-Moreno. A Scalable MMR Approach to Sentence Scoring for Multi-Document Update Summarization. *International Conference on Computational Linguistics (COLING)*. 2008.
- [34] Florian Boudin, Juan Torres-Moreno, and Marc El-Bèze. Mixing Statistical and Symbolic Approaches for Chemical Names Recognition. *Conference on Intelligent Text Processing and Computational Linguistics (CICLing)*. 2008.
- [35] Florian Boudin, Juan-Manuel Torres-Moreno, and Patricia Velázquez-Morales. An Efficient Statistical Approach for Automatic Organic Chemistry Summarization. *International Conference on Natural Language Processing (GoTAL)*. 2008.

- [36] Florian Boudin and Juan Torres Moreno. NEO-CORTEX: A Performant User-Oriented Multi-Document Summarization System. *Conference on Intelligent Text Processing and Computational Linguistics (CICLing)*. 2007.
- [37] Florian Boudin and Juan-Manuel Torres-Moreno. A Cosine Maximization Minimization approach for User Oriented Multi-Document Update Summarization. *Recent Advances in Natural Language Processing (RANLP)*. 2007.

Workshop Papers

- [38] Enrico Benedetti, Akiko Aizawa, and Florian Boudin. Automatically Suggesting Diverse Example Sentences for L2 Japanese Learners Using Pre-Trained Language Models. *Association for Computational Linguistics (ACL) Student Research Workshop.* 2024.
- [39] Florian Boudin, Richard Dufour, and Béatrice Daille. Projet NaviTerm: navigation terminologique pour une montée en compétence rapide et personnalisée sur un domaine de recherche. Actes de l'atelier "Analyse et Recherche de Textes Scientifiques" (ARTS). 2023.
- [40] Maël Houbre, Florian Boudin, and Béatrice Daille. Classification de relation pour la génération de mots-clés absents. *Actes de l'atelier "Analyse et Recherche de Textes Scientifiques"* (ARTS). 2023.
- [41] Léane Jourdan, Florian Boudin, Richard Dufour, and Nicolas Hernandez. CASIMIR: un Corpus d'Articles Scientifiques Intégrant les ModIfications et Révisions des auteurs. *Actes de l'atelier "Analyse et Recherche de Textes Scientifiques" (ARTS)*. 2023.
- [42] Léane Jourdan, Florian Boudin, Nicolas Hernandez, and Richard Dufour. Text revision in Scientific Writing Assistance: A Review. *International Workshop on Bibliometric-enhanced Information Retrieval (BIR)*. 2023.
- [43] Maël Houbre, Florian Boudin, and Beatrice Daille. A Large-Scale Dataset for Biomedical Keyphrase Generation. *International Workshop on Health Text Mining and Information Analysis (LOUHI)*. 2022.
- [44] Amir Hazem, Mérieme Bouhandi, Florian Boudin, and Béatrice Daille. TermEval 2020: TALN-LS2N System for Automatic Term Extraction. *International Workshop on Computational Terminology (CompuTerm)*. 2020.
- [45] Mérième Bouhandi, Florian Boudin, and Ygor Gallina. DeFT 2019: Auto-encodeurs, Gradient Boosting et combinaisons de modèles pour l'identification automatique de motsclés. *Défi Fouille de Textes (DEFT)*. 2019.
- [46] Florian Boudin, Hugo Mougard, and Damien Cram. How Document Pre-processing affects Keyphrase Extraction Performance. *Workshop on Noisy User-generated Text (WNUT)*. 2016.
- [47] Adrien Bougouin, Florian Boudin, and Béatrice Daille. TopicRank en domaines de spécialité: participation du LINA à DEFT 2016. *Défi Fouille de Textes (DEFT)*. 2016.
- [48] Béatrice Daille, Sabine Barreaux, Florian Boudin, Adrien Bougouin, Damien Cram, and Amir Hazem. Indexation d'articles scientifiques : Présentation et résultats du défi fouille de textes DEFT 2016. *Défi Fouille de Textes (DEFT)*. 2016.
- [49] Florian Boudin. Reducing Over-generation Errors for Automatic Keyphrase Extraction using Integer Linear Programming. *Workshop on Novel Computational Approaches to Keyphrase Extraction*. 2015.
- [50] Emmanuel Morin, Amir Hazem, Florian Boudin, and Elizaveta Loginova-Clouet. LINA: Identifying Comparable Documents from Wikipedia. *Workshop on Building and Using Comparable Corpora*. 2015.
- [51] Romain Deveaud and Florian Boudin. Effective Tweet Contextualization with Hashtags Performance Prediction and Multi-Document Summarization. *INitiative for the Evaluation of XML Retrieval (INEX)*. 2013.
- [52] Florian Boudin, Amir Hazem, Nicolas Hernandez, and Prajol Shrestha. Participation du LINA à DEFT2012 (LINA at DEFT2012). *Défi Fouille de Textes (DEFT)*. 2012.

- [53] Romain Deveaud and Florian Boudin. LIA/LINA at the INEX 2012 Tweet Contextualization track. *INitiative for the Evaluation of XML Retrieval (INEX)*. 2012.
- [54] Romain Deveaud, Florian Boudin, and Patrice Bellot. LIA at INEX 2010 Book Track. *INitiative for the Evaluation of XML Retrieval (INEX)*. 2011.
- [55] Florian Boudin, Jian-Yun Nie, and Martin Dawes. Deriving a test collection for clinical information retrieval from systematic reviews. *Data and Text Mining in Biomedical Informatics (DTMBIO)*. 2010.
- [56] Florian Boudin, Marc El-Bèze, and Juan-Manuel Torres-Moreno. The LIA Update Summarization system at TAC-2008. *Text Analysis Conference (TAC)*. 2008.
- [57] Florian Boudin, Benoit Favre, Frederic Béchet, Marc El-Bèze, Laurent Gillard, and Juan-Manuel Torres-Moreno. The LIA-Thales summarization system at DUC-2007. *Document Understanding Conference (DUC)*. 2007.
- [58] Benoit Favre, Frédéric Béchet, Patrice Bellot, Florian Boudin, Marc El-Beze, Laurent Gillard, Guy Lapalme, and Juan-Manuel Torres-Moreno. The LIA-Thales summarization system at DUC-2006. *Document Understanding Conference (DUC)*. 2006.

National Conference Papers

- [59] Adrien Bougouin, Florian Boudin, and Béatrice Daille. Modélisation unifiée du document et de son domaine pour une indexation par termes-clés libre et contrôlée. *Traitement Automatique des Langues Naturelles (TALN)*. 2016.
- [60] Adrien Bougouin, Florian Boudin, and Béatrice Daille. Influence des domaines de spécialité dans l'extraction de termes-clés. *Traitement Automatique des Langues Naturelles (TALN)*. 2014.
- [61] Florian Boudin. TALN Archives : une archive numérique francophone des articles de recherche en Traitement Automatique de la Langue. *Traitement Automatique des Langues Naturelles (TALN)*. 2013.
- [62] Romain Deveaud and Florian Boudin. Contextualisation automatique de Tweets à partir de Wikipédia. *Conférence en Recherche d'Information et Applications (CORIA)*. 2013.
- [63] Nicolas Hernandez and Florian Boudin. Construction d'un large corpus écrit libre annoté morpho-syntaxiquement en français. *Traitement Automatique des Langues Naturelles* (*TALN*). 2013.
- [64] Florian Boudin and Nicolas Hernandez. Détection et correction automatique d'erreurs d'annotation morpho-syntaxique du French TreeBank. *Traitement Automatique des Langues Naturelles (TALN)*. 2012.
- [65] Romain Deveaud, Florian Boudin, Eric SanJuan, and Patrice Bellot. Correction de césures et enrichissement de requêtes pour la recherche de livres. *Conférence en Recherche d'Information et Applications (CORIA)*. 2011.
- [66] Stéphane Huet, Florian Boudin, and Juan-Manuel Torres-Moreno. Utilisation d'un score de qualité de traduction pour le résumé multi-document cross-lingue. *Traitement Automatique des Langues Naturelles (TALN)*. 2011.
- [67] Florian Boudin and Juan-Manuel Torres-Moreno. Résumé automatique multi-document et indépendance de la langue : une première évaluation en français. *Traitement Automatique des Langues Naturelles (TALN)*. 2009.

Book Chapters

[68] Florian Boudin and Juan-Manuel Torres-Moreno. A Maximization-Minimization Approach for Update Text Summarization. *Current Issues in Linguistic Theory: Recent Advances in Natural Language Processing*. 2009.

Others

- [69] Florian Boudin. *Analyse et Indexation de Textes Scientifiques*. Habilitation à Diriger des Recherches Nantes Université. 2023.
- [70] Florian Boudin. *Exploration d'approches statistiques pour le résumé automatique de texte*. Thèse de Doctorat Université d'Avignon. 2008.

FUNDING

NaviTerm - Terminological navigation through the scientific literature 2022-2027

French Defense Innovation Agency and CNRS, $213k \in$ over four years. Sole PI.

DELICES - Indexer la littérature scientifique par expansion sémantique

ANR - JCJC, 200k€ over four years. Sole PI.

IKEBANA - Improving Keyphrase Extraction By Adopting Neural Architectures Atlanstic 2020 Sabbatical, research stay at the National Institute of Informatics, $20k \in$.

TALIAS - LE TAL au service de l'Indexation des Articles Scientifiques 2016

CNRS - PEPS INS2I, 5k€ over one year. Sole PI.

GOLEM - Approche par Optimisation pour l'Extraction de Mots-clés 2015

CNRS - PEPS INS2I/INSMI, 6k€ over one year. Sole PI.

SERVICE

Area Chairing

Action Editor for the ACL Rolling Review (since 2021)

ACL-IJCNLP 2021 (Summarization track), EMNLP 2022 (Summarization track), EMNLP 2023 (Summarization track), LREC-COLING 2024 (Information Retrieval track).

Programme Committee & Paper Reviewing

Reviewer for the ACL Rolling Review (since 2021)

Conferences

ACL (2017, 2019, 2020, 2021, 2023)

SIGIR (2023)

NAACL-HLT (2016, 2018, 2019, 2021)

EMNLP (2019, 2020, 2021)

EACL (2021)

ECIR (2023)

LREC (2012, 2018, 2020, 2022)

COLING (2016, 2018, 2020, 2022)

AACL-IJCNLP (2017, 2020, 2022, 2023)

CIKM (2011)

Workshops

Creative-sum at COLING 2022

DISCO at (JCDL 2021, EMNLP 2022)

NewSum at (EMNLP 2019, EMNLP 2021, EMNLP 2023)

Text2Story at (ECIR 2019, ECIR 2021, ECIR 2022)

NUSE at ACL 2020

AI4Narratives at IJCAI-PRICAI 2020

FNP-FNS 2020

MultiLing 2019 at RANLP 2019

Journal Reviewing

Traitement Automatique des Langues, Information Retrieval, Natural Language Engineering, Information Processing & Management, Language Resources and Evaluation, BMC Bioinformatics

TEACHING

Université de Nantes, France

3000h+

2020-2025

best reviewer in 2016

outstanding reviewer in 2020

Programming, Databases, Machine Learning

Université d'Avignon et des Pays de Vaucluse, France

96h

Programming, Business Intelligence

Université de Montréal, Canada Atelier en Informatique	54h
IUT d'Avignon, France	100h
Programming, Databases	