

Iana Atanassova, Ph.D.

Full Professor in Natural Language Processing
Director of Centre de Recherches Interdisciplinaires et Transculturelles
Université Marie et Louis Pasteur, CRIT, F-25000 Besançon, France
Institut Universitaire de France (IUF), France

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ORCID <http://orcid.org/0000-0003-3571-4006>
CV HAL <https://cv.hal.science/iana-atanassova>



CURRENT POSITION

FULL PROFESSOR	Since 09/2025
Université Marie et Louis Pasteur, Besançon, France	
Centre de Recherches Interdisciplinaires et Transculturelles (CRIT)	

JUNIOR MEMBER	Since 09/2021
Institut Universitaire de France (IUF)	
https://www.iufrance.fr/les-membres-de-liuf/membre/2288-iana-atanassova.html	

DIRECTOR	Since 11/2023
Centre de Recherches Interdisciplinaires et Transculturelles (CRIT)	
https://crit.univ-fcomte.fr/	

RESEARCH TOPICS

My research is in the field of **Natural Language Processing (NLP)** and more specifically **full-text processing of scientific papers**. It is part of the research theme "Languages, Knowledge and Discourse" at the CRIT laboratory, with the development of linguistic approaches in NLP for the analysis of scientific discourse. I study the problems of **semantic annotation, ontology population, linguistic modelling and information extraction from scientific texts**. I have used NLP methods to process scientific corpora for building applications in bibliometrics and recommender systems. I have also participated in projects on text mining for competitive intelligence and personal data identification and representation.

My **recent research projects** focus on the study of the rhetorical structure of articles, and in particular the **expression of uncertainty** as part of the process of constructing new scientific knowledge (e.g. the ANR InSciM project).

RESEARCH PROJECTS

PRINCIPAL INVESTIGATOR (PI) AND SUPERVISOR

PI, project InSciM - "Modelling Uncertainty in Science"	2021–2025
funded by French ANR JCJC grant, ANR-21-CE38-0003-01 (270K euros). https://project-inscim.github.io/	

SUPERVISOR, project EMONTAL 2020–2024
"Extraction and Ontology Modeling of Subjects and Places for the Exploitation of the Documentary Funds of Bourgogne Franche-Comté" : supervision of a PhD thesis, funded by Région Bourgogne Franche-Comté.
<http://tesniere.univ-fcomte.fr/projet-emontal/>

SUPERVISOR, project "Researcher-entrepreneur" ICE 2023–2024
"Applications of NLP for the construction of tools for language teaching" : supervision of a post-doctoral fellow (Dr François-C. Rey), funded by Université de Bourgogne Franche-Comté, France, with the objective of technology transfer to a start-up.

SUPERVISOR, Project "Automatic correction of text responses to exams" 2021–2023
Collaboration and technology transfer to the start-up e-Cole, funded by Technopole de la Réunion.

PI, project DecRIPT - "Detection of the Representations of Personal Data in Texts". <http://tesniere.univ-fcomte.fr/projet-decript/> 2019–2023
funded by Interreg France-Switzerland 2014-2020 (307K euros) and Communauté du Savoir (9K euros).
- Academic partners : HEG (Switzerland), HEG Arc (Switzerland)
- Private partners : ERDIL (France), Global Data Excellence (Switzerland)
- Objectives : Building tools for the reliable processing of personal data in texts to facilitate compliance with GDPR.

SUPERVISOR, project "Researcher-entrepreneur" ICE 2016–2021
"Linguistic analysis and automatic extraction of semantic relations in Arabic" : supervision of a PhD thesis and a post-doctoral fellow (Dr Youcef Morsi), funded by Université de Bourgogne Franche-Comté, France, with the objective of technology transfer to a start-up.

PARTICIPATION IN PROJECTS

PARTICIPANT, project "Visial Operational Bibliography" (BIBILIOVISOP) 2025–2027
funded by FR-EDUC, France, PI Michaël Crevoisier

PARTICIPANT, project "Epistemic concepts in the practice of science" 2024–2027
funded by CRSH, Canada, PI Pr. Christophe Malaterre

PARTICIPANT, project TheoScit 2020–2024
funded by French ANR JCJC grant, PI Dr Marc Bertin, ANR-20-CE38-0003

PARTICIPANT, project SEO-ELP "Search Engine Optimization e-Learning Platform" 2018–2025
funded by Université de Franche-Comté, France. <https://seo-elp.fr/>

PARTICIPANT, project WebSO+ : Competitive Intelligence Platform 2016–2018
funded by Interreg France-Switzerland 2014-2020. Development of a platform for strategic technological and competitive intelligence and e-reputation integrating semantic processing, text classification and sentiment analysis. <http://tesniere.univ-fcomte.fr/projet-webso/index.html>

PARTICIPANT, project SARS : "System for assisted scientific writing in the biomedical domain" 2015–2017
funded by Région Franche-Comté, France. Development of tools for scientific writing using lexical databases and Information Retrieval.

POST-DOCTORAL SUPERVISION

DR AURÉLIE NOMBLOT, PostDoc researcher-entrepreneur	09/2025–08/2026
DR NICOLAS GUTERHLÉ, as part of ANR InSciM project	07/2024–12/2025
DR FRANÇOIS-C. REY, PostDoc researcher-entrepreneur	09/2023–08/2024
DR ABDOULAYE GUISSÉ, as part of DecRIPT project	01/2021–05/2021
DR YUCEF MORSI, PostDoc researcher-entrepreneur	09/2020–08/2021
DR FRANÇOIS-C. REY, as part of DecRIPT project	01/2020–12/2020

PHD THESIS SUPERVISION

IANIS PONTIER "Scientific uncertainty in popular science texts : annotation and interdisciplinary analysis", funded by French Ministry for Education and Research	2025–
PANGGIH KUSUMA NINGRUM "Modelling the expression of uncertainty in scientific articles", funded by project ANR InSciM	2022–2025
NICOLAS GUTERHLÉ "Extraction and ontological modelling of actors and places for the exploitation of the documentary funds of the Bourgogne Franche-Comté Region", Project EMONTAL, funded by Bourgogne Franche-Comté Region	2020–2024
SALAH YAHIAOUI "Information extraction of spatio-temporal data from scientific texts", funded by French Ministry for Education and Research	2019–2023
YUCEF MORSI "Linguistic Analysis and Automatic Information Extraction of Semantic Relations in Arabic", funded by project researcher-entrepreneur	2016–2020
FRANÇOIS-C. REY "Ontology of uncertainty and semantic annotation of a corpus dealing with climate change", co-directed with Dr Marc Bertin, University Lyon-1, France	2016–2022

MSc THESIS SUPERVISION

MSc theses prepared during 2 years and defended as part of the Master's degree of Natural Language Processing of Université de Franche-Comté, Besançon, France.

Non-exhaustive list.

	2025
L. RODRIGUES DE ALMEIDA, J. TADEI, M. POTIER, M. MATHIE, CH. MENSCH	2024
B. FERNANDES DE BRITO, S. POPOVIC, J. YANG, S. YACOUBI	2023
E. BOFFETTI	2022

J. BACCHIOCCHI, C.-T. KUO, M.A. NGUYEN THI	2021
R. HASNAOUI, J. BERGOEND	2020
S. YAHIAOUI, A. CALATAYUD	2019
N. GUTERHLÉ, C. EL CADI, I. HATIRA, L. ANNEBI	2018
L. LOGRADA, F.-C. REY, M. DELHOTAL, Y. MORSI	2016

PARTICIPATION IN PhD THESIS JURYS

As thesis referee :

MATHIEU LAI-KING, "Quality of Research Articles and Neural Language Models : Applications to the Biomedical Domain" 2025
Université Paris-Saclay, France

As external examiner :

PAVEL SAVOV, "Measuring the Novelty of Scientific Papers" 2021
Polish-Japanese Academy of Information Technology, Poland

MILOUD ROUABHI, "Analyse sémantico-cognitive de prépositions en vue d'un traitement automatique" 2019
Paris-Sorbonne (Paris 4) University, France

DRAHOMIRA HERRMANNOVA, "Mining Scholarly Publications for Research Evaluation" 2018
Knowledge Media institute, The Open University, United Kingdom

DORY SINGH, "Extraction des relations de causalité dans les textes économiques par la méthode de l'exploration contextuelle" 2017
Paris-Sorbonne (Paris 4) University, France

PARTICIPATION IN PhD THESIS SUPERVISION COMMITTEES

Non-exhaustive list.

MOUAZ MIKAIL (2024–2025); LÉO ANNEBI (2021–2024); AHMED ALUSTATH (2020); DHEKRA NAJAR (2018); HONG LIANG (2017)

SERVICE

RESPONSIBILITIES

ELECTED MEMBER OF THE RESEARCH COMMISSION 04/2025–
Université Marie et Louis Pasteur, France.

DIRECTOR OF THE CRIT LABORATORY 11/2023–
Centre de Recherches Interdisciplinaires et Transculturelles (CRIT), Université Marie et Louis Pasteur, France.

CO-DIRECTOR OF THE CRIT LABORATORY 09/2022–10/2023

CRIT, Université de Franche-Comté ¹, France.

REFERENT FOR OPEN SCIENCE

09/2021–

CRIT, Université Marie et Louis Pasteur, France.

MANAGER OF THE DEPARTMENT OF NATURAL LANGUAGE PROCESSING

09/2020–

Université Marie et Louis Pasteur, France.

COURSE MANAGEMENT

COURSE MANAGER OF THE SPECIALTY "NATURAL LANGUAGE PROCESSING (NLP)"

09/2017–

Master of Science "Languages and Foreign Cultures (LLCER)", Université Marie et Louis Pasteur, France.

ISO/AFNOR COMMISSION

MEMBER OF ISO/TC 37/SC 4 "LANGUAGE RESOURCE MANAGEMENT"

06/2022–

WG 2 "Semantic annotation".

MEMBER OF WORK GROUP AFNOR/X03A, ISO/TC 37/SC 4

09/2014–

Terminology principles and coordination. National referent for ISO 24617 "Semantic Annotation Framework". <https://norminfo.afnor.org/membre/atanassova-iana797933>

ORGANISATION OF WORKSHOPS AND SCIENTIFIC EVENTS

DOCTORAL FORUM

Armenia, 2025

20th International Conference on Scientometrics and Informetrics (ISSI), Yerevan.

<https://issi2025.iiap.sci.am/>

ANNUAL IUF CONFERENCE "LE TEMPS"

France, 2025

Univesité Marie et Louis Pasteur, Besançon. <https://2025iuf.sciencesconf.org/>

WORKSHOP CLBIB "Mining Scientific Papers : Computational Linguistics and Bibliometrics"

China, 2017

16th International Conference on Scientometrics and Informetrics (ISSI), Wuhan.

<https://easychair.org/cfp/CLBib2017>

WORKSHOP "TRAITEMENT AUTOMATIQUE DES LANGUES SLAVES (TASLA)"

France, 2015

Conference TALN 2015, France. <http://tesniere.univ-fcomte.fr/tasla/>

WORKSHOP CLBIB "Mining Scientific Papers : Computational Linguistics and Bibliometrics"

Turkey, 2015

15th International Society of Scientometrics and Informetrics Conference (ISSI), Istanbul.

WORKSHOP "Analyses logométriques des revues québécoises : traitements et visualisations"

Canada, 2015

Colloque "Relire les revues québécoises : histoires, formes et pratiques", Montréal, Canada.

1. Université de Franche-Comté is the name of Université Marie et Louis Pasteur before 2025.

ADVISORY BOARDS

MEMBER OF THE ADVISORY BOARD OF THE ECLATS JOURNAL 2020–
published by doctoral candidates of LECLA Doctoral School, France. <https://preo.u-bourgogne.fr/eclats/>

MEMBER OF THE ADVISORY BOARD OF THE SIPS PLATFORM "*Information System in Philosophy of Science*" 2019–
Université Marie et Louis Pasteur, France. <https://sips.univ-fcomte.fr/>

MEMBER OF THE ADVISORY BOARD OF THE "*NATURAL LANGUAGE PROCESSING*" SERIES 2018–
John Benjamins publishing. <https://benjamins.com/catalog/nlp>.

ELECTED MEMBER OF THE ADVISORY BOARD OF THE DOCTORAL SCHOOL LECLA 2016–
Université de Bourgogne Franche-Comté (UBFC), France. <https://lecla.ubfc.fr/>

EVALUATION PANELS

EVALUATOR FOR THE CANADA INNOVATION FUND 2025
Canada Foundation for Innovation, Canada.

MEMBER OF THE ANR AAPG EVALUATION PANEL 2023
CE10 – Industry and factory of the future : People, organisations, technologies, France.

REVIEWER FOR THE NSERC DISCOVERY GRANTS 2023
Natural Sciences and Engineering Research Council of Canada (NSERC), Computer Science (EG 1507) / CRSNG, Canada.

EVALUATOR FOR JOHN R. EVANS LEADERS FUND 2020
Canada Foundation for Innovation, Canada.

EVALUATOR FOR THE ANRT CIFRE DOCTORAL GRANTS 2015
ANRT, France.

EDITORIAL WORK

MEMBER OF THE EDITORIAL BOARD OF JOURNAL OF INFOMETRICS, Elsevier Since 2025
<https://www.sciencedirect.com/journal/journal-of-infometrics>

EDITOR OF A SPECIAL ISSUE 2022
"*Languages Analysis, Comparison and Generation - Systems, Models and Applications. Homage to Peter Greenfield*" in Bulag No 40, ISBN 978-2-84867-948-8. S. Cardey, F.-C. Rey, I. Atanassova (eds.)
<https://pufc.univ-fcomte.fr/bulag-40.html>

EDITOR OF A RESEARCH TOPIC 2022
"*Mining Scientific Papers, Volume II : Knowledge Discovery and Data Exploitation*" in "Frontiers in Research Metrics and Analytics". Editorial doi : 10.3389/frma.2022.911070.
<https://www.frontiersin.org/research-topics/13388/mining-scientific-papers-volume-ii-knowledge-discovery-and-data-exploitation>

EDITOR OF A RESEARCH TOPIC 2019
"*Mining Scientific Papers : NLP-enhanced Bibliometrics*" in "Frontiers in Research Metrics and Analytics". Edi-

torial doi : 10.3389/frma.2022.911070.

<https://www.frontiersin.org/research-topics/7043/mining-scientific-papers-nlp-enhanced-bibliometrics>

REVIEWS AND PROGRAMME COMMITTEES

Non-exhaustive list.

REVIEWER FOR INTERNATIONAL JOURNALS :

- Traitement Automatique des Langues (TAL) : 2024 (2)
- Scientometrics : 2023, 2022 (2), 2019 (3), 2018 (6), 2017 (3)
- International Journal on Digital Libraries (IJDL) : 2023, 2021, 2016
- Quantitative Science Studies (QSS) : 2020
- Journal of Infometrics : 2017 (3), 2016, 2015
- Aslib Journal of Information Management : 2016
- Nature Machine Intelligence : 2020
- Journal of Natural Language Engineering (JNLE) : 2024, 2019
- Revue Ingénierie des Systèmes d'Information, numéro spécial (ISI) : 2017
- Computational Intelligence : 2016

MEMBER OF THE PROGRAMME COMMITTEES OF INTERNATIONAL WORKSHOPS AND CONFERENCES :

- SCOLIA 2025
- International Symposium Interdisciplinary approaches to phraseological units (PUs) in world languages : Linguistics - NLP & AI - Translation - Literature : 2025 (<https://aiup.sciencesconf.org>)
- Annual International Conference of the Institute for Bulgarian Language (ConfIBL) : 2024, 2023, 2022, 2020
- Extraction and Evaluation of Knowledge Entities from Scientific Documents (EEKE) at JCDL : 2023
- Joint Conference on Digital Libraries (JCDL) : 2023, 2022
- International Conference on Computational Linguistics (COLING) : 2022
- Bibliometrics and Information Retrieval (BIR) : 2024, 2023, 2021, 2020, 2019, 2018, 2017, 2016, 2014
- Bibliometric-enhanced Information Retrieval and NLP for Digital Libraries (BIRNDL) : 2019, 2018, 2017, 2016
- Workshop On Mining Scientific Publications (WOSP) at LREC : 2020, 2018, 2017
- Workshop on Natural Language Processing for Digital Humanities (NLP4DH) : 2022, 2021
- Recent Advances in Natural Language Processing (RANLP) : 2021, 2017
- The International Florida Artificial Intelligence Research Society Conference (FLAIRS) : 2023, 2022, 2021, 2020, 2019, 2015–2017
- The American Association for the Advancement of Science (AAAS) 2015 Annual Meeting
- The International ACM Conference on Management of computational and collective intelligence in Digital EcoSystems (MEDES) : 2016, 2015, 2014
- International Conference on Computational Collective Intelligence (ICCCI) : 2022, 2021, 2020
- Conférence sur le Traitement Automatique des Langues Naturelles (JEP-TALN-RECITAL) : 2020
- Workshop on Scholarly Web Mining (SWM) : 2017
- Workshop on Scholarly Document Processing (SDP) : 2021, 2020
- Electronic lexicography in the 21st century (eLex) : 2017
- Computational Linguistics in Bulgaria (CLIB) : 2024, 2022, 2020, 2018
- Workshop on AI + Informetrics (AII) : 2021
- 4th International Workshop on Detection, Representation, and Exploitation of Events in the Semantic

ASSOCIATIONS AND SOCIETIES

ISSI (INTERNATIONAL SOCIETY OF SCIENTOMETRICS AND INFOMETRICS)	Member since 2023
ATALA (ASSOCIATION POUR LE TRAITEMENT AUTOMATIQUE DES LANGUES)	Member since 2014

GRANTS AND PRIZES

IUF (INSTITUT UNIVERSITAIRE DE FRANCE) RESEARCH GRANT, JUNIOR MEMBER, France	2021–2026
GRANT FOR DOCTORAL SUPERVISION AND RESEARCH (PEDR), France	2019–2021
FIRST PRIZE OF THE INOVHACKTION HACKATHON Organised by the Air Force France on the Intelligent analysis of documents. http://actu.univ-fcomte.fr/article/le-traitement-automatique-des-langues-seduit-larmee-005704	2017
NOMINATION Annual International Society for Scientometrics and Infometrics (ISSI) Paper of the year award : Marc Bertin, Iana Atanassova, Vincent Larivière, and Yves Gingras. The Invariant Distribution of References in Scientific Papers. JASIST, 2016.	2016

SCIENCE DISSEMINATION

ORGANISER OF THE TEDONNÉES WORKSHOP SERIES FOR THE GENERAL PUBLIC

The TEDonnées (<http://tesniere.univ-fcomte.fr/tedonnees/tedonnees2024/>, "Emerging Data Processing Tools") workshops, Besançon, France, aim to promote interactions between students, researchers and firms in the field of NLP, and to inform the general public. Several editions were organised on the following topics :

- 2017, Data mining and e-reputation
- 2018, Smart cities and language technologies
- 2022, Fake News and credibility of the public information
- 2024, Exchanging and innovating : SSH at the horizon of digital technology

SCIENCE MAP "THE COGNITIVE CONTEXT OF CITATIONS" 2014
In the *Places & Spaces 10th iteration : The Future of Science Mapping* exhibit. <https://scimaps.org/map/10/6>

ARTICLES AND INTERVIEWS :

- 2024, "Donner un nouveau sens aux documents historiques", En Direct, Université de Franche-Comté, No. 312. <https://endirect.univ-fcomte.fr/publication/patrimoine-ecritdonner-un-nouveau-sens-aux-documents-historiques/>
- 2018, "Le traitement automatique des langues séduit l'armée", En Direct, Université de Franche-Comté, No 274.
<https://endirect.univ-fcomte.fr/publication/le-traitem-automatique-des-langues-sduit-larme/>

- 2017, TDM Stories “The structure of papers”, OpenMinTeD Interview <http://openminted.eu/tdm-stories-structure-papers/>
- 2016, “Au commencement était le verbe”, En Direct, Université de Franche-Comté, No. 266 <https://endirect.univ-fcomte.fr/publication/dompter-le-big-data/#commencement>

PARTICIPATION AT SCIENCE DISSEMINATION EVENTS :

- 2024, “La science : des certitudes ou des hypothèses?”, Presenting the project ANR InSciM, Fête de la Science, Besançon, France. <https://bit.ly/InSciM-diffusion1>
- 2022 (Nancy), 2024 (Limoges), participant as researcher in AI in “IUF dans le cartable”, France. <https://www.iufrance.fr/liuf-dans-le-cartable.html>

TEACHING ACTIVITY

Non-exhaustive list.

IN MSc SPECIALTY NLP IN “LANGUAGES AND FOREIGN CULTURES” (LLCER) 2024–
 Université de Franche-Comté (UFC), Besançon, France
 Courses (lectures & tutorial classes) : Methodology in NLP, Methods in Machine learning, Research methodology.

IN MSc SPECIALTY NLP IN “LANGUAGES AND FOREIGN CULTURES” (LLCER) 2014–2024
 Université de Franche-Comté (UFC), Besançon, France
 Courses (lectures & tutorial classes) : Methodology in NLP, Computer Programming for NLP, Information extraction and IR, Etymology, Cognitive Methods and ML, Software engineering for NLP.

IN MSc “LANGUAGES AND FOREIGN CULTURES” (LLCER), ALL SPECIALTIES 2014–2024
 Université de Franche-Comté (UFC), Besançon, France
 Courses (lectures & tutorial classes) : Collaborative work and project management, Information Retrieval

IN BSc “LANGUAGES AND FOREIGN CULTURES”, SPECIALTY NLP 2014–2019
 Université de Franche-Comté (UFC), Besançon, France
 Courses (lectures & tutorial classes) : Computational Linguistics, Formal linguistics and informatics, Introduction to computer programming for NLP.

IN URFIST DE LYON, France 2019 & 2020
 Courses : “Introduction to scientific writing with L^AT_EX”

IN MSc “FRENCH LANGUAGE AND APPLICATIONS” 2011–2012
 Université Paris-Sorbonne, Paris, France.
 Course : “Introduction to Informatics and Natural Language Processing” (lectures & tutorial classes).

IN BSc “FRENCH LANGUAGE AND INFORMATICS” 2009–2011
 Université Paris-Sorbonne, Paris, France.
 Courses : “Logics and Introduction to Informatics” (tutorial classes); “General Mathematics and Analysis - 1” (lectures & tutorial classes); “Preparation for the Certificate of Informatics and Internet (C2i) - level 1” (lectures & tutorial classes).

IN MSc “INFORMATICS AND LANGUAGE ENGINEERING FOR INFORMATION MANAGEMENT” 2009–2011
 Université Paris-Sorbonne, Paris, France.

Courses : "Methodology and scientific reasoning" (tutorial classes).

IN MSc "*PHILOSOPHY AND SOCIOLOGY*"

2006–2009

Université Paris-Sorbonne, Paris, France.

Courses : "Informatic tools" (tutorial classes).

WORK EXPERIENCE

ASSISTANT PROFESSOR IN NATURAL LANGUAGE PROCESSING,
Université de Franche-Comté, Besançon, France

09/2014–08/2015

INTERNATIONAL MOBILITY ERASMUS+ STA, University of Wolverhampton, UK

02/2017

Research and teaching stay at the Research Institute in Information and Language Processing (RIILP), Research Group in Computational Linguistics

POST-DOCTORAL FELLOW, Concordia University, Montréal, Canada

01/2014–08/2014

Semantic processing of corpora in humanities and social sciences, under the direction of Prof. Jean-Philippe Warren.

RESEARCH AND DEVELOPMENT MANAGER, MyScienceWork, France/Luxembourg

03/2012–06/2013

Implementation of a search engine for scientific papers for the MyScienceWork social network.

TEACHING AND RESEARCH ASSISTANT (ATER)

09/2009–08/2011

Université Paris-Sorbonne, Institut des Sciences Humaines Appliquées, Paris, France.

EDUCATION

HABILITATION TO DIRECT RESEARCH (HDR)

12/2015

Specialty "Natural Language Processing", Université de Franche-Comté, Besançon, France.

Title : "*Qualitative and quantitative analysis of scientific discourse. Applications to Information Extraction, Information Retrieval and the Semantic Web*"

Supervisor : Pr. Sylviane Cardey (University of Franche-Comté, France)

Jury : Pr. R. Mitkov (University of Wolverhampton, UK); Pr. Ch. Roche (Université de Savoie, France); Pr. B. K. Bogacki (Université de Varsovie, Pologne); Pr. L. Da Sylva (Université de Montréal, Canada); Pr. J.-P. Desclés (Paris-Sorbonne University, France); Pr. P. Pognan (INALCO, France).

PHD IN "MATHEMATICS, INFORMATICS AND APPLICATIONS TO HUMAN SCIENCES"

01/2012

Université Paris-Sorbonne, Faculté des Lettres, laboratoire LaLIC-STIH, Paris, France.

Title : "*Exploiting semantic annotations for information retrieval and text navigation*"

Supervisor : Pr. J.-P. Desclés (Paris-Sorbonne University, Paris, France)

Jury : Pr. Th. Poibeau (CNRS, LaTTiCe, France); Pr. M. Hassoun (ENSSIB, France); Dr. Ch. Harbulot (EGE, France); Dr. B. Djoua (STIH, Paris-Sorbonne, France).

MSC "INFORMATION AND COMMUNICATION"

2005–2006

Université Paris-Sorbonne, Faculté des Lettres, Paris, France.

MSc thesis title : "*Semantic annotations of texts in French and in Bulgarian with the Excom engine. Automatic syntheses*", supervised by Pr. J.-P. Desclés

<p>MSc "COMPUTATIONAL LINGUISTICS", Sofia University, Sofia, Bulgaria Faculty of Classical and Modern Philology</p>	2004–2005
<p>BSc IN ENGLISH PHILOLOGY, Sofia University, Faculty of Classical and Modern Philology Sofia, Bulgarie</p>	2002–2005
<p>BSc IN MATHEMATICS, Sofia University, Sofia, Bulgarie Faculty of Mathematics and Informatics</p>	2000–2004

PUBLICATION RECORD

In the following list, my name appears **in bold** and the names of the students under my supervision are underlined.

INTERNATIONAL PEER-REVIEWED JOURNALS

- [1] Panggih Kusuma Ningrum, Nicolas Gutehrlé et **Iana Atanassova**. « Etudier l'incertitude dans les articles scientifiques : mise en perspective d'une méthode linguistique ». In : *Revue des Nouvelles Technologies de l'Information* Extraction et Gestion des Connaissances, RNTI-E-41 (2025), p. 111-122.
- [2] Panggih Kusuma Ningrum, Philipp Mayr, Nina Smirnova et **Iana Atanassova**. « Annotating scientific uncertainty : A comprehensive model using linguistic patterns and comparison with existing approaches ». In : *Journal of Informetrics* 19.2 (mai 2025). ISSN : 1751-1577. DOI : [10.1016/j.joi.2025.101661](https://doi.org/10.1016/j.joi.2025.101661).
- [3] Marc Bertin et **Iana Atanassova**. « Linguistic perspectives in deciphering citation function classification ». In : *Scientometrics* (juill. 2024). DOI : [10.1007/s11192-024-05082-4](https://doi.org/10.1007/s11192-024-05082-4). URL : <https://link.springer.com/article/10.1007/s11192-024-05082-4>.
- [4] Panggih Kusuma Ningrum et **Iana Atanassova**. « Annotation of scientific uncertainty using linguistic patterns ». In : *Scientometrics* (mai 2024). DOI : [10.1007/s11192-024-05009-z](https://doi.org/10.1007/s11192-024-05009-z).
- [5] **Iana Atanassova**, Marc Bertin et Philipp Mayr. « Editorial : Mining Scientific Papers, Volume II : Knowledge Discovery and Data Exploitation ». In : *Frontiers in Research Metrics and Analytics* 7 (2022). Sous la dir. de Chaomei Chen. ISSN : 2504-0537. DOI : [10.3389/frma.2022.911070](https://doi.org/10.3389/frma.2022.911070). URL : <https://www.frontiersin.org/articles/10.3389/frma.2022.911070>.
- [6] Marc Bertin et **Iana Atanassova**. « Preprint Citation Practice in PLOS ». In : *Scientometrics* 127.12 (2022), p. 6895-6912. DOI : [10.1007/s11192-022-04388-5](https://doi.org/10.1007/s11192-022-04388-5). URL : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9186004/>.
- [7] Abdoulaye Guisse et **Iana Atanassova**. « Noyau Informatique CripTex pour le Traitement de Données Personnelles dans les Textes ». In : *Bulletin de Linguistique Appliquée et Générale, Presses Universitaires de Franche-Comté PUFC* 40 (2022). Sous la dir. de Sylviane Cardey, François-C Rey et Iana Atanassova, p. 597-612. ISSN : 0758 6787.
- [8] Nicolas Gutehrlé et **Iana Atanassova**. « Processing the structure of documents : Logical Layout Analysis of historical newspapers in French ». In : *Journal of Data Mining & Digital Humanities* NLP4DH (2022). DOI : [10.46298/jdmdh.9093](https://doi.org/10.46298/jdmdh.9093). URL : <https://jdmdh.episciences.org/9614>.
- [9] Alexis Kauffmann, François-Claude Rey, **Iana Atanassova**, Arnaud Gaudinat, Peter Greenfield, Hélène Madinier et Sylviane Cardey. « Indirectly Named Entity Recognition ». In : *Journal of Computer-Assisted Linguistic Research (JCLR)* 5.1 (2021), p. 27-46. DOI : [10.4995/JCLR.2021.15922](https://doi.org/10.4995/JCLR.2021.15922). URL : <https://polipapers.upv.es/index.php/jclr/article/view/15922>.

BOOK CHAPTERS

EDITOR OF SPECIAL ISSUES OF JOURNALS

- [10] « Mining Scientific Papers Volume II : Knowledge Discovery and Data Exploitation ». In : *Frontiers in Research Metrics and Analytics*. Sous la dir. d'**Iana Atanassova**, Marc Bertin et Philipp Mayr. 2022. URL : <https://www.frontiersin.org/research-topics/13388/mining-scientific-papers-volume-ii-knowledge-discovery-and-data-exploitation>.
- [11] Sylviane Cardey-Greenfield, François-Claude Rey et **Iana Atanassova**. « Languages Analysis, Comparison and Generation - Systems, Models and Applications ». In : *BULAG - Bulletin de linguistique appliquée et générale*. 40. Presses Universitaires de Franche-Comté, 2022.

EDITOR OF CONFERENCE PROCEEDINGS

KEYNOTE TALKS

- [12] **Iana Atanassova**. « Approches linguistiques pour la fouille d'articles scientifiques ». In : *Atelier Text-Mine'24, Conférence internationale sur l'extraction et la gestion des connaissances (EGC 2024)*. Dijon, France, jan. 2024.

INTERNATIONAL CONFERENCES AND WORKSHOPS

- [13] **Iana Atanassova**, Panggih Kusuma Ningrum, Nicolas Gutehrlé, Francis Lareau et Christophe Malaterre. « Is There Life on Mars? Studying the Context of Uncertainty in Astrobiology ». In : *20th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2025)*. Yerevan, Armenia, juin 2025.
- [14] **Iana Atanassova** et Marc Bertin. « Breaking Boundaries in Citation Parsing : A Comparative Study of Generative LLMs and Traditional Out-of-the-box Citation Parsers ». In : *International Workshop on Bibliometric-enhanced Information Retrieval (BIR 2024) co-located with the 46st European Conference on Information Retrieval (ECIR 2024)*. Glasgow, Scotland, 2024. URL : <https://ceur-ws.org/Vol-3989/paper-04.pdf>.
- [15] **Iana Atanassova**, Marine Potier, Maya Mathie, Marc Bertin et Panggih Kusuma Ningrum. « Critical-Minds : Enhancing ML Models for ESG Impact Analysis Categorisation Using Linguistic Resources and Aspect-Based Sentiment Analysis ». In : *Joint Workshop of the 7th Financial Technology and Natural Language Processing and the 5th Knowledge Discovery from Unstructured Data in Financial Services, and the 4th Workshop on Economics and Natural Language Processing @ LREC-COLING-2024*. Sous la dir. d'Association for Computational Linguistics. Financial Technology and Natural Language Processing (FinNLP). Torino, Italy, mai 2024, p. 248-253.
- [16] Marc Bertin et **Iana Atanassova**. « Le multilinguisme dans les références bibliographiques : une étude de corpus ». In : *Conférence internationale sur l'extraction et la gestion des connaissances (EGC 2024)*. Dijon, 24 jan. 2024.
- [17] Emel Dalgic, Alexandre Lefort et **Iana Atanassova**. « Correction automatique de réponses textuelles : une approche basée sur des schémas conceptuels ». In : *Conférence internationale sur l'extraction et la gestion des connaissances (EGC 2024)*. Dijon, 26 jan. 2024.

- [18] **Iana Atanassova** et Marc Bertin. « Multilingualism in References : a study of the ISTEEX Dataset ». In : *19th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2023)*. Bloomington, Indiana, US, juill. 2023.
- [19] Marc Bertin et **Iana Atanassova**. « Citing Foreign Language Sources : an Analysis of the S2ORC Dataset ». In : *10th International Workshop on Bibliometric-enhanced Information Retrieval (BIR 2023) co-located with the European Conference on Information Retrieval (ECIR 2023)*. Dublin, Ireland, 2023.
- [20] Marc Bertin et **Iana Atanassova**. « Contextual Analysis of Citations in Context Using Rule-Based Approaches. Best Soups are Made in Old Pots ». In : *19th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2023)*. Bloomington, Indiana, US, juill. 2023.
- [21] Nicolas Gutehrle et **Iana Atanassova**. « Comprendre les archives : vers de nouvelles interfaces de recherche reposant sur l'annotation sémantique des documents ». In : *CiDE.23 : 23^{ème} édition du Colloque International sur le Document Electronique "Document et archivage : pratiques formelles et informelles dans les organisations"*. Grenoble, France, 2023.
- [22] Panggih Kusuma Ningrum et **Iana Atanassova**. « Scientific Uncertainty : an Annotation Framework and Corpus Study in Different Disciplines ». In : *19th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2023)*. Bloomington, Indiana, US, juill. 2023.
- [23] Panggih Kusuma Ningrum, Philipp Mayr et **Iana Atanassova**. « UnScientify : Detecting Scientific Uncertainty in Scholarly ». In : *Proceedings of Joint Workshop of the 4th Extraction and Evaluation of Knowledge Entities from Scientific Documents (EEKE2023) and the 3rd AI + Informetrics (AII2023) co-located with the JCDL 2023*. Santa Fe, New Mexico, USA et Online, juin 2023.
- [24] Walid El Abed, Hélène Madinier, Sylviane Cardey, Thierry Bregnard et **Iana Atanassova**. « Semantically-Driven Knowledge Modelling for the Business Ecosystem ». In : *International Forum on Knowledge Asset Dynamics - IFKAD, Managing Knowledge for Sustainability* (Lugano, Switzerland). 2022.
- [25] Salah Yahiaoui et **Iana Atanassova**. « TimeInfo : a Semantic Annotation Framework for Temporal Information in Scientific Papers ». In : *Terminology & Ontology : Théories and applications (TOTh 2022)*. 2022.
- [26] **Iana Atanassova**, Sylviane Cardey-Greenfield, Hélène Madinier et Walid El Abed. « Identification et gestion des données personnelles dans les textes ». In : *CiDE.22 : 22^{ème} édition du Colloque International sur le Document Electronique Données Documents Connaissances : Perspectives de recherche et d'enseignement*. Paris, France, 2021.
- [27] Marc Bertin et **Iana Atanassova**. « Enjeux de l'étude des contextes citationnels dans le cadre des études bibliométriques : contextes de citation et blocs citationnels ». In : *CiDE.22 : 22^{ème} édition du Colloque International sur le Document Electronique Données Documents Connaissances : Perspectives de recherche et d'enseignement*. Paris, France, 2021.
- [28] Marc Bertin et **Iana Atanassova**. « The Place of Preprint Citations in the IMRaD Structure : a Study of PLOS Journals ». In : *18th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2021)*. Leuven, Belgium, 2021.
- [29] Nicolas Gutehrle et **Iana Atanassova**. « Logical Layout Analysis Applied to Historical Newspapers ». In : *Workshop on Natural Language Processing for Digital Humanities (NLP4DH) co-located with ICON 2021*. Déc. 2021. URL : https://hal.archives-ouvertes.fr/hal-03468972/file/9_Paper-2.pdf.
- [30] Mariannig Le Béhec et **Iana Atanassova**. « Data Papers et dissémination des données de la recherche : quelles pratiques en SHS ? » In : *Colloque DHNord2021 : Publier, partager, réutiliser les données de la recherche : les data papers et leurs enjeux*. France, nov. 2021.

NATIONAL CONFERENCES AND WORKSHOPS

COMMUNICATIONS

- [31] Christophe Malaterre, **Iana Atanassova**, Francis Lareau et Panggih Kusuma Ningrum. « Navigating the Unknown : A Textual Analysis of Uncertainty in Astrobiology Research ». In : *Congress of the Canadian Society for the History and Philosophy of Science (CSHPS)*. Canadian Society for the History and Philosophy of Science (CSHPS). Montréal (Québec), Canada, 2024. URL : <https://hal.science/hal-04780332>.
- [32] **Iana Atanassova**, Thierry Bregnard, Walid El Abed, Hitoshi Isahara et Sylviane Cardey. « Personal Data in Texts : Detection, Annotation and Governance ». In : *Panel in Computers, Privacy and Data Protection (CPDP) Conference* (Brussels, Belgium). 2022. URL : <https://www.cpdpconferences.org/cpdpc-panels/personal-data-in-texts-detection-annotation-and-governance>.
- [33] **Iana Atanassova** et François-C. Rey. *Categorising Scientific Uncertainty in Papers*. Poster. SciNLP 2021 at Virtual conference hosted at Automated Knowledge Base Construction (ABKC) 2021, 2021.
- [34] Jean-Claude Domenget, Sylvain Sagot et **Iana Atanassova**. « Concevoir un dispositif innovant pour professionnaliser la formation au référencement web : le projet SEO-ELP ». In : *Congrès ACFAS*. Sherbrooke, Canada, 2020.

SEMINARS

- [35] **Iana Atanassova**. « A journey into Scientific Uncertainty : Building a Project of Excellence in the HSS ». In : *Networking and Training Workshop - CrECI Project*. Université de Franche-Comté. Besançon, France, 2023.
- [36] Iana Atanassova. « What can we learn by processing scientific papers ? Looking for the invariants of scientific writing ». In : *Seminaire*. Research Group in Computational Linguistics (RGCL), Université de Woverhampton. Royaume Uni, 20 fév. 2017.
- [37] Iana Atanassova. « Mining Scientific Papers : Structure, Citations, Semantics ». In : *Seminaire*. Centre for Science et Technology Studies (CWTS). Leiden, Pays Bas, 14 oct. 2016.

DISSEMINATION OF SCIENCE

DATASETS

- [38] Panggih Kusuma Ningrum et **Iana Atanassova**. *AURORA-MESS : Annotated Uncertainty and Reference in Open Research Articles for Multidisciplinary and Empirical Social Science*. Version ver1. Zenodo, mars 2025. DOI : [10.5281/zenodo.15001250](https://doi.org/10.5281/zenodo.15001250). URL : <https://doi.org/10.5281/zenodo.15001250>.
- [39] Panggih Kusuma Ningrum, **Iana Atanassova** et Nicolas Gutehrle. *MUSIC-OpRA : Multidimensional Uncertainty in Scientific Interdisciplinary Corpora for Open Research Article*. Version ver1. Zenodo, avr. 2025. DOI : [10.5281/zenodo.15173356](https://doi.org/10.5281/zenodo.15173356). URL : <https://doi.org/10.5281/zenodo.15173356>.
- [40] Marc Bertin et **Iana Atanassova**. *Synthetic Dataset of Citation Strings in 12 Styles*. Version 1.0.0. Zenodo, mars 2024. DOI : [10.5281/zenodo.10839503](https://doi.org/10.5281/zenodo.10839503). URL : <https://doi.org/10.5281/zenodo.10839503>.

- [41] Nicolas Gutehrlé, Panggih Kusuma Ningrum et **Iana Atanassova**. *Annotated Dataset for Uncertainty Mining : Gold Standard*. Zenodo, nov. 2024. DOI : [10.5281/zenodo.14134215](https://doi.org/10.5281/zenodo.14134215). URL : <https://doi.org/10.5281/zenodo.14134215>.
- [42] Panggih Kusuma Ningrum et **Iana Atanassova**. *Dataset for Multidisciplinary Uncertainty Mining - ver1*. Version 1. Zenodo, juin 2023. DOI : [10.5281/zenodo.8024787](https://doi.org/10.5281/zenodo.8024787). URL : <https://doi.org/10.5281/zenodo.8024787>.
- [43] Marine Potier et **Iana Atanassova**. *Questions for Galops 1-7 horse riding theoretical exams and their textual answers with enumerations*. Zenodo, déc. 2023. DOI : [10.5281/zenodo.10303742](https://doi.org/10.5281/zenodo.10303742). URL : <https://doi.org/10.5281/zenodo.10303742>.
- [44] Salah Yahiaoui et **Iana Atanassova**. *TimeTank : A Corpus of Sentences Annotated with TimeInfo for Temporal Data*. Version 1.0. Zenodo, sept. 2023. DOI : [10.5281/zenodo.8364409](https://doi.org/10.5281/zenodo.8364409). URL : <https://doi.org/10.5281/zenodo.8364409>.

REPORTS

- [45] Sean Macavaney et al. *Report on the Collab-a-thon at ECIR 2024*. Rapp. tech. ACM SIGIR Forum, mars 2024, Vol. 58 No. 1. URL : <https://hal.science/hal-04746200>.