

Laure Soulier

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Positions

Since January 2022

Maître de Conférences/Associate professor in Computer Sciences

Sorbonne University, ISIR UMR 722 CNRS, UFR 919 Ingénierie, Paris - France

Sept. 2022 – Aug. 2023

Maître de Conférences/Associate professor in Computer Sciences – Délégation CNRS

Laboratoire Interdisciplinaire des Sciences du Numérique (LISN) UMR 9015 CNRS

Septembre 2015 - Dec. 2021

Maître de Conférences/Associate professor in Computer Sciences

Sorbonne University, LIP6 UMR 7606 CNRS, UFR 919 Ingénierie, Paris - France

October 2014 – August 2015

Teaching and Research assistant

Université Toulouse III, IRIT, Faculté des Sciences et d'Ingénierie

October 2011 – September 2014

PhD - with teaching load

Université Toulouse III, Faculté des Sciences et d'Ingénierie

Diplôme

March, 20th, 2023

Habilitation à Diriger les Recherches

"Neural language models for faithful data-to-text generation and proactive conversational search"

Sorbonne Université - ISIR - Equipe "Machine Learning for Information Access"

- *Reviewers* : Pr. Marie-Francine Moens KU Leuven - Belgium Pr. Eric Gaussier (Université Grenoble Alpes - France), Pr. Evangelos Kanoulas (University of Amsterdam - Netherlands)
- *Examinators* : Pr. Laurent Besacier (Naverlabs Europe - France), Pr. Fabio Crestani (Università della Svizzera Italiana - Switzerland), Dr. Catherine Pelchaud (Sorbonne Université - France)

October 2011 – December 2014 **PhD. in Computer Sciences**

Definition and evaluation of collaborative information retrieval models based on domain skills and roles.

Université Toulouse III - IRIT - Team SIG

- *Advisor* : Pr. Lynda Tamine-Lechani
- *Co-advisor* : MCF Wahiba Bahsoun
- *Reviewers* : Pr. Eric Gaussier (Université Grenoble 1), Pr. Jian-Yun Nie (Université Montréal, Canada)
- *Jury members* : Pr. Florence Sedes (UPS), Pr. Maarten de Rijke (Université d'Amsterdam), Pr. Patrick Gallinari (Sorbonne Université), Pr. Chihab Hanachi (Université Toulouse I)

Research activity and main results

Research interest

My research is motivated by the proposal of new models based on deep learning for information retrieval and automatic natural language processing, and automatic natural language processing. The common objective of these models is to facilitate processing and access to textual data. (Large) language models are at the core of my various projects, which have applications related to semantic learning, human-machine interaction (in information retrieval and robotics) and continual learning. Since 2018, I have been involved in two major research projects focusing on data-to-text generation and conversational information retrieval. Below, the evolution of my research themes since 2011.

- **Collaborative information retrieval (2011-2016)**
- **Semantic-driven deep neural ranking models (2015-2018)**
- **Multimodal representation learning models for natural language processing (2015-2018)**
- **Data-to-text : description generation from structured data (since 2018)**
- **Search-oriented conversational systems (since 2018)**
- Continual learning (initiated in 2021)
- Natural language instruction generation for robotics (initiated in 2023)
- Large language models, multimodality, information retrieval, and frugality (initiated in 2023)

Thesis supervision

Florian Le Bronnec - December 2022

Doctoral School : Paris Dauphine

Title : Data-to-text generation models

Supervision rate : 25% Laure Soulier - 25% Vincent Guigue - 50% Alexandre Allauzen

Tristan Luiggi - septembre 2021

Doctoral School : EDITE - Thèse CIFRE Upskills

Title : Data-to-text generation : numerical reasoning and data structuration

Supervision rate 50% Laure Soulier - 50% Vincent Guigue

Publications : [Lui+23]

Jean-Baptiste Gaya - avril 2021

Doctoral School : EDITE - Thèse CIFRE FAIR

Title : Continual learning for reinforcement learning models

Supervision rate 50% Laure Soulier - 50% Ludovic Denoyer

Publications : [Gay+22; Gay+23]

Pierre Erbacher - January 2021 (ANR JCJC)

Doctoral School : EDITE

Title : Conversational information retrieval models

Supervision rate : 100% Laure Soulier (first year cosupervised with Ludovic Denoyer)

Publications : [Erb+21a; Erb+21b; Erb+22a; Erb+22b; Erb+23]

Clément Rebuffel - October 2018 - July 2022

Doctoral School : EDITE

Title : Data-to-text generation

Supervision rate : 70% Laure Soulier - 30% Patrick Gallinari

Publications : [Reb+20c; Reb+20a; Reb+20b; Reb19]

Eloi Zablocki - october 2016 - October 2019

Doctoral School : EDITE

Title : Context-based multimodal representation learning

Supervision rate : 33% Laure Soulier - 33% Benjamin Piwowarski - 33% Patrick Gallinari

Publications : [Zab+17; Zab+18; Zab+19; Bor+19a; Bor+19b]

Gia-Hung Nguyen - October 2015 - December 2018

Doctoral School : MITT (Toulouse)

Title : Knowledge-based driven neural ranking models

Supervision rate : 40% Laure Soulier - 40% Lynda Tamine (IRIT) - 20% Nathalie Souf (IRIT)

Publications : [Ngu+16; Ngu+17a; Ngu+17b; Ngu+17c; Ngu+18a; Ngu+18b; Tam+19]

Post-doctoral supervision

- 2022 Louis Falissard (1 year)
- Title : Natural language processing for the BNF Gallica collection
 - Period : Nov. 2022 to August 2023
 - Publication : [Fal+23]
- 2021 Thomas Gérald (1 year)
- Title : Continual learning for information retrieval
 - Period : January to December 2021
 - Publication : [nameECIR2023; Ger+22b; Ger+22a; Dje+22b; Dje+22c; Le +] + TREC CAST participation

Engineer supervision

- 2023 Iskandar Boucharenc (collaboration with LISN)
- Title : Explainability of transfer learning in language models
 - Period : January to August 2023
 - Publication : Poster to the Visu day at Paris Saclay University

Internship supervision

- 2023 Sarah Abchiche (co-supervision with Vincent Guigue)
- Title : Numerical reasoning and language models
 - Period : September to July 2023
 - Publication : [Abc+]
- Amric Trudel (co-supervision with Nicolas Thome and Olivier Sigaud)
- Title : Generating natural language instructions for robots
 - Period : April to September 2023
- Ben Kabongo (collaboration with Université Jean Monnet - Saint Etienne)
- Title : Personalized data-to-text generation
 - Period : June to August 2023
- Nadège Alavoine (collaboration with LISN)
- Title : Information retrieval for Paris Saclay University's library
 - Period : December 2022 to August 2022

- 2022*
- Richard Serrano (co-supervision with IRIT)
 - Title : Hierarchical answer generation for complex information needs
 - Period : April to August 2022
 - Tra-My Nguyen (collaboration with Université Jean Monnet - Saint Etienne)
 - Title : Personalized data-to-text generation
 - Period : April to September 2022
 - Tonglin Yan (collaboration with LAMSADE and MNHN)
 - Title : Generating data-to-text datasets
 - Period : March to July 2022
 - Nam Le Hai
 - Title : TREC CAST participation
 - Period : June to August 2022
 - Publication : [Hai+23; Le +], Participation TREC CAST
- 2021*
- Hanane Djeddal (co-supervision with IRIT)
 - Title : Lifelong learning and conversational systems (6 months)
 - Period : February to August 2021
 - Publication : [Dje+22b]
 - Nada Staouite (collaboration with Critéo)
 - Title : Data-to-text / Text-to-Data
 - Period : June to November 2021
 - Nawel Astouati
 - Title : TREC CAST participation
 - Period : June to August 2021
 - Publication : TREC CAST participation
- 2020*
- Jesus Louvon (co-supervision with IRIT)
 - Title : Lifelong learning and information retrieval (6 months)
 - Publication : [Lov+21b]
 - Amine Djeghri et Aymen Merrouche (intern from M1 DAC)
 - Title : evaluation of search-oriented IR models (2 months)
- 2019*
- Adrien Pouyet (intern from M2 DAC - co-supervision with Ludovic Denoyer)
 - Title : query reformulation for conversational IR (6 months)
 - Ismaël Bonneau et Yannis Karmim (insterns from M1 DAC)
 - Title : Knowledge base-driven IR models (3 months)
- 2018*
- Wafa Aissa (intern from M2 DAC - co-supervision avec Ludovic Denoyer)
 - Title : query reformulation (6 months)
 - Publication : [Ais+18]
 - Clément Bosc (intern from M1 DC in Toulouse - co-supervision with Lynda Tamine/IRIT)
 - Title : Knowledge base-driven IR models (3 months)
 - publication : [Ngu+20]
- 2017*
- Patrick Bordes (intern from M2 MVA - co-supervision ith Benjamin Piwowarski and Patrick Gallinari)
 - Title : Relation extraction from multimodal data (6 months)
 - Publication : [Zab+17]
 - Thomas Gandillon (intern from M1 DC in Toulouse - co-supervision with Lynda Tamine/IRIT)
 - Title : Knowledge base-driven IR models (4 months)
- 2016*
- Thomas Gérard (intern from M2 DAC - co-supervision with Benjamin Piwowarski and Patrick Gallinari)
 - Title : Classification of temporal relations (6 months)

- 2015 Gia-Hung Nguyen (intern M2 RIBD in Toulouse- co-supervision with Lynda Tamine)
 — Title : Collaborative information retrieval on social networks (6 months)
 — Publication : [Lau+16b]
- 2014 Laurent Clastrier (intern M1 Informatique in Toulouse)
 — Title : log analysis for collaborative IR (4 months)
 — Publication : [Tam+15]
- Paul Mousset (intern L3 - co-supervision with Lamjed Ben Jabeur and Lynda Tamine)
 — Title : Exploratory analysis of collaboration in social networks (4 months)
 — Publication : [Tam+16c]

Research projects - Coordination and participation

- 2024 – 2028 *Nom* : **General Purpose Dialogue-assisted Digital Information Access (GUIDANCE)**
Description : ANR TSIA 2023
Porteur : ISIR (B. Piwowarski)
Partenaires : ISIR ; IRIT ; LIG ; LIS
- 2022 – 2026 *Name* : Counterfactual Learning for Controlled Data-to-text generation (ACDC)
Description : ANR PRCE (AAPG 2021 - CES 23)
Coordinator : ISIR (S. Lamprier)
Partners : ISIR ; LAMSADE ; MNHN ; Recital
- 2018 – 2024 *Name* : SEArch-oriented ConverSational systeMS (SESAMS)
Description : ANR JCJC (AAPG 2018 - CES 23)
***Coordinator* : LIP6 (L. Soulier)**
Partners : LIP6 ; CRIStAL/Inria, DIRO (Montréal)
Publications : [Ais+18 ; Erb+21a]
- 2015 – 2018 *Name* : MULTimodal processing of Spatial and TEMPoral expReSSions (MUSTER)
Description : Chist-ERA 2014 : Human Language Understanding : Grounding Language Learning (HLU)
Coordinator : LIP6 (B. Piwowarski)
Partners : LIP6 ; KU Leuven (Belgique), ETH Zurich (Suisse), UPV/EHU (Spain)
Publications : [Bor+19a ; Zab+19 ; Bor+19b ; Zab+18 ; Zab+17]
- 2014 – 2015 *Name* : EXPloration sur l’usage des médias sociaux pour un Accès Collaboratif à l’information (EXPAC)
Call : PEPS CNRS transdisciplinaire, HuMaIn : Humanités, Mathématiques, Sciences de l’Information
Coordinator : IRIT (L. Tamine-Lechani)
Partners : IRIT- SIG ; CNRS March Bloch, Berlin ; Maths, SMMA, Université Paris Sorbonne
Publications : [Tam+16c ; Lau+16b]

Organization of conferences and workshops

- 2023 CORIA-TALN : Co-organizer.
- 2019 SIGIR :Local chair.
 RJCRI@CORIA : Chair.
- 2018 CLEF : Lab chair [Bel+18 ; Cap+18].
 ECIR : Publicity chair.
 DECOR@ICDE : Co-chair.

- 2017 ECol@CHIIR : Co-chair [Azz+17b; Azz+17a].
- 2015 ECol@CIKM : Co-chair [Lau+16c; Azz+15a]. (ELIAS grant).
CLEF : Publicity chair.

Member of Scientific committee

- 2018-2023 Member of CLEF Steering committee (Conference and Labs of the Evaluation Forum : <http://www.clef-initiative.eu/>)

Program committee member and Journal reviewer

– Reviewer for international journals

- 2020 TAFFC · ACM TOIS
- 2019 ESWA
- 2018 TPAMI · TAFFC
- 2017 JASIST · IRJ
- 2016 JASIST · IJDL
- 2015 IP&M
- 2014 IP&M · ESWA

– Committee member of conferences

- | | International | National |
|------|-------------------------------------|-----------------|
| 2023 | ECIR · SIGIR · ICTIR | CORIA-TALN |
| 2022 | ECIR · SIGIR · CIKM · EMNLP | CIRCLE |
| 2021 | ECIR · SIGIR · CIKM · EMNLP | CORIA |
| 2020 | ECIR · SIGIR · ECAI · AAAI · COLING | CORIA (CIRCLE) |
| 2019 | ECIR · IJDL | CORIA |
| 2018 | SIGIR · WWW · ICTIR · ECIR · JCDL | CORIA |
| 2017 | SIGIR · CIKM · ICTIR | CORIA · MARAMI |
| 2016 | SIGIR · COLING · | CORIA · MARAMI |
| 2015 | SIGIR · JCDL | RJCRI |
| 2014 | AIRS | |

Invited talks

- 2023 - BNF (June 2022) : Panelist "Quelles articulations entre les différentes formes de recommandation, algorithmiques et humaines?"
- 2021 - LISN Seminar (February 2022) "Data-to-text generation : let your data speak fluently"
- 2021 - DGC seminar (September 2021) : "Deep learning for information retrieval : state of the art and perspectives"
- NaverLabs (May 2021) "Data-to-text generation : let your data speak fluently"
- Summer school ETAL (June 2021) : Lecturer - "Information retrieval models" and practical activities
- 2020 - "THL et multimodalité" Days - THL/AFIA (oct 2020) : "From multimodal representation learning to multimodal information access"
- LIS seminar - Marseille (December 2020) : "From multimodal representation learning to multimodal information access"

- 2019
- PhisIA seminar - Univ Paris Diderot (nov 2019) : "Le symbolique au service du connexionnisme et vice-versa : apprentissage de représentation augmenté, extraction d'information et bases de connaissances"
 - ERIC lab seminar (oct 2019) : "Apprentissage de représentations textuelles augmentées bases de connaissances : application à la Recherche d'information"
 - GDR IA - 2019 : "Ancrage visuel et conceptuel du texte pour l'apprentissage de représentation"
 - Panelist for the Pré-GDR TAL (March 2019)
- 2016
- Laboratoire ERIC "De la Recherche d'information collaborative à la recherche d'information socio-collaborative : fondements, modèles et perspectives"

International collaborations - travel exchanges

- 6-13 September 2021 2015 **Invited researcher**
 Computer science department - Turin university - Italy
Host : Rossella Cancelliere
- January 2015 **Post-Doctoral intern**
 Département de mathématiques/NAXYS, Université de Namur - Belgique
Encadrement : Renaud Lambiotte (Professeur Assistant, Université de Namur)
- May – July 2013 **Doctoral intern**
 SC&I - Rutgers University, New Brunswick NJ - USA
Encadrement : Chirag Shah (Professeur Assistant, Université de Rutgers)
Publications : [[Lau+14a](#); [Lau+16d](#)]

PhD jury member

- 30 March 2023 Hugo Boulanger - Université Paris Saclay. Advisors : Sophie Rosset and Thomas Lavergne.
- 7 March 2023 Jonathan Raiman - Université Paris Saclay. Advisors : Michèle Sebag and Johanne Cohen.
- 15 February 2023 Mireille Fares - Sorbonne Université. Advisors : Catherine Pelachaud and Nicolas Obin.
- 14 Dec. 2022 Oralie Cattan - Université Paris Saclay. Advisors : Sophie Rosset and Christophe Servan.
- 14 June 2022 Alice Martin - Institut polytechnique de Paris. Advisors : Sylvain Le Corff, Olivier Pietquin.
- 26 Nov. 2021 Thomas Dopierre - Université Jean Monnet - Saint Etienne. Advisors : Christophe Gravier et Frédérique Laforest.
- October 2021 Hicham El Boukkouri - Université Paris Saclay. Advisor : Pierre Zweigenbaum, Olivier Ferret and Thomas Lavergne.
- February 2021 Djibril Frej - Université Grenoble Alpes. Advisor : Jean-Pierre Chevallet and Didier Scwab.
- October 2020 Warith Harchaoui - Université Paris Décartes. Advisor : Charles Bouveyron.
- May 2020 Julien Tissier - Université Jean Monnet - Saint Etienne. Advisors : Christophe Gravier and Amaury Habrard.
- July 2019 Hady El Sahar - Université Jean Monnet - Saint Etienne. Advisors : Christophe Gravier and Florence Laforest.

May 2019 Hedi Ben Younes - Sorbonne Université. Advisors : Matthieu Cord and Nicolas Thome.

October 2018 Micael Carvalho - Sorbonne Université. Advisors : Matthieu Cord and Nicolas Thome.

Disseminating and promoting research results for the benefit of society

Expertise and support for national organizations

2022 Appraisal of a startup project for the Agoranov incubator

Dissemination

July 2023 [Ecriture d'article dans Science et Pseudo Science "De l'analyse de la langue aux modèles génératifs "](#)

May 2023 [Jury of the "Ateliers de Réflexion Ethique Jeunes" at the Saint-Denis town hall](#)

April 2023 [Les voix de la vallée - Fondation Jacques Cartier](#)
[Université de Laval \(Canada\) podcast - Episode 59](#)
[Café Capsule - Sorbonne University](#)
[France Info "Le grand témoin" - 10 April](#)

Mach 2023 [Hors série Epsilon "Super pouvoir"](#)

February 2023 [Sciences et Avenir](#)
[L'étudiant](#)
[Madame Figaro](#)
[Le Figaro](#)
[Ouest-France](#)

January 2023 [Sorbonne university](#)
[France Culture – Les matinales](#)
[Le Figaro](#)
[Le Monde Pixel](#)
[NextInpact](#)

March 2022 [Le Monde](#)

Teaching activities since 2015 - Sorbonne Université

I present in the table below the service time related to teaching since 2015, when I moved to UPMC/Sorbonne University. The hours are expressed in face-to-face time (hCM for lectures, hTD for exercises hours, hME for practical activities on computers, hG for responsibility hours).

I teach in both bachelor's and master's programs. I'm **responsible for several UEs in both the bachelor's and master's programs**. I'm also involved in **the student recruitment process for the DAC master's program**.

Level	Year	UE	hCM	hTD	hTME	hG	Responsibilities
L1	2015-2017	Programming with Python 1		71.75h			
L1	2021-2022	Data sciences		38.5h			
L2 Info.	2015-2016	Vocational Guidance and Integration		22h			
	2017-2020	Programming with Java		113.75h		3	Drafting of a project topic and participation in the drafting of the make-up topic.
L2 ATIC	2015-2018	Internship		76h			UE responsible - content creation and student follow-up
	2015-2018	Internship		68h			UE responsible - student follow-up and defenses
L3 Info.	2015-2022	Web technologies	98h	228.75h		26h	UE responsible since 2016 - Content creation, project evaluation and exam writing
M1 DAC	2015-2022	Software and Research project DAC		66h			Proposal of a project topic and supervision of a group of students
	2016-2022	Business Intelligence	62h		72h		UE responsible since 2017, creation of course, TD and TME materials, drafting of project and exam subjects
	2018-2022	Information retrieval and NLP	52h	44h	52h		UE co-responsible , creation of course, TD and TME materials, drafting of project and exam subjects for the IR part
M2 DAC	2020-2022	Advanced machine learning and Deep learning		56			
	2019-2022	Data Science and research methodology	44	34			UE co-responsible , creation of course, TD and TME materials, drafting of project and exam subjects for the research methodology part
	2016-2018	Data mining and social medias	12h		12h		Creation of a new part of the course on the methodology for formalizing and evaluating models
	2018-2019	Information retrieval	14h				
	2019-2022	Internship		28			
		Total	282h	844.75h	136h	29h	

In addition to my undergraduate and master's teaching activities, I also teach professional courses :

- **Formation Continue - Sorbonne Université - DU "Machine Learning and Artificial Intelligence"**
Set-up and teaching of the following modules : 1) Deep Learning for text (8h) - 2) Opening course : Information retrieval (4h) - 3) Project follow-up (over 2 months).
1 session per year for 4 years.
- **Formation Continue Renault - "Introduction to artificial intelligence"**
Teaching of 4h done with Vincent Guigue.
2 sessions per year for 4 years.
- **Formation Continue - Sorbonne Université - "Demystifying ChatGPT"**
Teaching of 4h done with Vincent Guigue.

Local and national responsibilities

<i>2022 - ...</i>	Member of the board of the ARIA association (IR French Association) - in charge of scientific animation.
<i>2020 - ...</i>	Member of the orientation committee of ARIA (IR French Association).
<i>2020-2021</i>	President of an evaluation committee at the National Research Agency (ANR - CES 38).
<i>2019-2020</i>	Vice-President of an evaluation committee at the National Research Agency (ANR - CES 38).
<i>2018-2019</i>	Member of an evaluation committee at the National Research Agency (ANR - CES 38).
<i>2017/2021</i>	Member of the selection process for recruitment of Maître de conférences : <ul style="list-style-type: none"> — MCF section 06 : Sorbonne Université (2018), Université Bretagne Sud (2019), IUT Toulouse (2019), CNAM (2020), INSA Lyon (2020)). — "MCF section 27 Polytech" : Université Aix-Marseille (2018) — "MCF section 65" : Sorbonne Université (2021)
<i>2016 - 2020</i>	Member of the organization committee of the Computer Science Colloquium of Sorbonne University. Invited speakers : Léon Bottou (Facebook), Eric Horvitz (Microsoft Research), Caroline Chavier (WIMLDS Paris).
<i>2015 - 2017</i>	Young Expert for HCERES doctoral school evaluation "Sciences Technologie Santé" (UPJV - 30 novembre 2016), "Sciences pour l'ingénieur" (UTC - 1 décembre 2016), "Sciences et ingénierie des systèmes, mathématiques, informatique" (ComUE - 7 février 2017), "Sciences et ingénierie des matériaux, mécanique, énergétique" (ComUE - 8 février 2017) et "EUCLIDE - ED multidisciplinaire" (La Rochelle, 19 octobre 2017).
<i>2012 - 2014</i>	Representative of PhD student at the doctoral school MITT- Toulouse.

Publications

The complete list of my publications can be found on [Google Scholar](#)

International journals

- [Reb+22] Clément REBUFFEL, Marco ROBERTI, **LAURE SOULIER**, Geoffrey SCOUTHEETEN, Rossella CANCELLIERE et Patrick GALLINARI. “Controlling Hallucinations at Word Level in Data-to-Text Generation”. In : *Data Mining and Knowledge Discovery* (2022). **Impact factor (2020) : 2.629**
- [Tam+19] Lynda TAMINE, **LAURE SOULIER**, Gia-Hung NGUYEN et Nathalie SOUF. “Offline versus Online Representation Learning of Documents Using External Knowledge”. In : *ACM Trans. Inf. Syst.* 37.4 (2019), 42 :1-42 :34. **Impact factor (2019) : 4.676**
- [Lau+17] **LAURE SOULIER** et Lynda TAMINE. “On the Collaboration Support in Information Retrieval”. In : *ACM Comput. Surv.* 50.4 (2017), 51 :1-51 :34. **Impact factor (2019) : 7.990**
- [Lau+16d] **LAURE SOULIER**, Lynda TAMINE et Chirag SHAH. “MineRank : Leveraging users’ latent roles for unsupervised collaborative information retrieval”. In : *Inf. Process. Manage.* 52.6 (2016), p. 1122-1141. **Impact factor (2016) : 2.391**
- [Lau+14b] **LAURE SOULIER**, Lynda TAMINE et Wahiba BAHOUN. “On domain expertise-based roles in collaborative information retrieval”. In : *Inf. Process. Manage.* 50.5 (2014), p. 752-774. **Impact factor (2014) : 1.265**
- [Lau+13a] **LAURE SOULIER**, Lamjed Ben JABEUR, Lynda TAMINE et Wahiba BAHOUN. “On ranking relevant entities in heterogeneous networks using a language-based model”. In : *JASIST* 64.3 (2013), p. 500-515. **Impact factor (2013) : 2.230**

National journals

- [Ngu+20] Gia-Hung NGUYEN, Lynda TAMINE, **LAURE SOULIER**, Clément BOSC et Nathalie SOU. “Modèle neuronal tripartite pour la représentation de documents.” In : *Document Numérique* (2020).
- [Lau+15b] **LAURE SOULIER** et Lynda TAMINE. “Vers l’intégration des métarôles pour la recherche d’information collaborative”. In : *Document Numérique* 18.2-3 (2015), p. 9-38.

International conferences - long papers

- [Gay+23] Jean-Baptiste GAYA, Thang DOAN, Lucas CACCIA, **LAURE SOULIER**, Ludovic DENOYER et Roberta RAILEANU. “Building a Subspace of Policies for Scalable Continual Learning”. In : *The Eleventh International Conference on Learning Representations, ICLR*. 2023. **core ranking : A*, 31.8 % acceptance rate**
- [Hai+23] Nam Le HAI, Thomas GERALD, Thibault FORMAL, Jian-Yun NIE, Benjamin PIWOWARSKI et **LAURE SOULIER**. “CoSPLADE : Contextualizing SPLADE for Conversational Information Retrieval”. In : *The 43rd European Conference on IR Research, ECIR 2023*. Springer, 2023. **core ranking : A, 29% acceptance rate**
- [Lui+23] Tristan LUIGGI, **LAURE SOULIER**, Vincent GUIGUE, Siwar JENDOUBI et Aurélien BAELDE. “Dynamic Named Entity Recognition”. In : *the 38th ACM/SIGAPP Symposium on Applied Computing, SAC*. 2023.
- [Gay+22] Jean-Baptiste GAYA, **LAURE SOULIER** et Ludovic DENOYER. “Learning a subspace of policies for online adaptation in Reinforcement Learning”. In : *The Tenth International Conference on Learning Representations, ICLR*. 2022. **core ranking : A*, 32.9% acceptance rate**
- [Ger+22b] Thomas GERALD et Laure SOULIER. “Continual Learning of Long Topic Sequences in Neural Information Retrieval”. In : *The 43rd European Conference on IR Research, ECIR*. T. 13185. Springer, 2022, p. 244-259. **core ranking : A, 20% acceptance rate**

- [Lov+21b] Jesús LOVÓN-MELGAREJO, **LAURE SOULIER**, Karen PINEL-SAUVAGNAT et Lynda TAMINE. “Studying Catastrophic Forgetting in Neural Ranking Models”. In : *The 43rd European Conference on IR Research, ECIR 2021*. Springer, 2021, p. 375-390. **core ranking : A, 26% acceptance rate**
- [Luk+21b] Thomas LUKA, **LAURE SOULIER** et David PICARD. “Unsupervised Word Representations Learning with Bilinear Convolutional Network on Characters”. In : *The 29th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, ESANN*. 2021.
- [Reb+20a] Clément REBUFFEL, **LAURE SOULIER**, Geoffrey SCOUTHEETEN et Patrick GALLINARI. “A Hierarchical Model for Data-to-Text Generation”. In : *The 42nd European Conference on IR Research, ECIR*. 2020. **core ranking : A, 26% acceptance rate**
- [Reb+20c] Clément REBUFFEL, **LAURE SOULIER**, Geoffrey SCOUTHEETEN et Patrick GALLINARI. “PARENTing via Model-Agnostic Reinforcement Learning to Correct Pathological Behaviors in Data-to-Text Generation”. In : *The 13th International Conference on Natural Language Generation, INLG*. 2020, p. 120-130. **core ranking : B, 38% acceptance rate**
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- [Zab+19] Eloi ZABLOCKI, Patrick BORDES, **LAURE SOULIER**, Benjamin PIWOWARSKI et Patrick GALLINARI. “Context-Aware Zero-Shot Learning for Object Recognition”. In : *The 36th International Conference on Machine Learning, ICML*. 2019, p. 7292-7303. **core ranking : A*, 22.6% acceptance rate**
- [Car+18b] Micael CARVALHO, Rémi CADÈNE, David PICARD, **LAURE SOULIER**, Nicolas THOME et Matthieu CORD. “Cross-Modal Retrieval in the Cooking Context : Learning Semantic Text-Image Embeddings”. In : *The 41st International ACM SIGIR Conference on Research & Development in Information Retrieval, SIGIR*. 2018, p. 35-44. **core ranking : A***
- [Ngu+18a] Gia-Hung NGUYEN, Lynda TAMINE, **LAURE SOULIER** et Nathalie SOUF. “A Tri-Partite Neural Document Language Model for Semantic Information Retrieval”. In : *The Semantic Web - 15th International Conference, ESWC*. 2018, p. 445-461. **core ranking : A**
- [Zab+18] Eloi ZABLOCKI, Benjamin PIWOWARSKI, **LAURE SOULIER** et Patrick GALLINARI. “Learning Multi-Modal Word Representation Grounded in Visual Context”. In : *The Thirty-Second AAAI Conference on Artificial Intelligence*. 2018. **core ranking : A***
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- [Tam+16c] Lynda TAMINE, **LAURE SOULIER**, Lamjed Ben JABEUR, Frédéric AMBLARD, Chihab HANACHI, Gilles HUBERT et Camille ROTH. “Social Media-Based Collaborative Information Access : Analysis of Online Crisis-Related Twitter Conversations”. In : *The 27th ACM Conference on Hypertext and Social Media, HT*. 2016, p. 159-168.

- [Tam+15] Lynda TAMINE et **LAURE SOULIER**. “Understanding the Impact of the Role Factor in Collaborative Information Retrieval”. In : *The 24th ACM International Conference on Information and Knowledge Management, CIKM*. 2015, p. 43-52. **core ranking : A**
- [Lau+14a] **LAURE SOULIER**, Chirag SHAH et Lynda TAMINE. “User-driven system-mediated collaborative information retrieval”. In : *The 37th International ACM SIGIR Conference on Research and Development in Information Retrieval*. 2014, p. 485-494. **core ranking : A***
- [Lau+13b] **LAURE SOULIER**, Lynda TAMINE et Wahiba BAHOUN. “A Collaborative Document Ranking Model for a Multi-faceted Search”. In : *The 9th Asia Information Retrieval Societies Conference, AIRS*. 2013, p. 109-120. **core ranking : C**
- [Lau+12a] **LAURE SOULIER**, Lamjed Ben JABEUR, Lynda TAMINE et Wahiba BAHOUN. “BibRank : a language-based model for co-ranking entities in bibliographic networks”. In : *The 12th ACM/IEEE-CS Joint Conference on Digital Libraries, JCDL*. 2012, p. 61-70. **core ranking : A**

International conferences - short papers

- [Dje+22b] Hanane DJEDDAL, Thomas GERALD, **LAURE SOULIER**, Karen PINEL-SAUVAGNAT et Lynda TAMINE. “Does Structure Matter ? Leveraging Data-to-Text Generation for Answering Complex Information Needs”. In : *The 44th European Conference on IR Research, ECIR*. T. 13186. 2022, p. 93-101. **core ranking : A, 22% acceptance rate**
- [Erb+22a] Pierre ERBACHER, Ludovic DENOYER et **LAURE SOULIER**. “Interactive Query Clarification and Refinement via User Simulation”. In : *The 45th International ACM SIGIR Conference on Research and Development in Information Retrieval*. ACM, 2022, p. 2420-2425. **core ranking : A*, 24.7% acceptance rate**
- [Reb+21] Clément REBUFFEL, Thomas SCIALOM, **LAURE SOULIER**, Benjamin PIWOWARSKI, Sylvain LAMPRIER, Jacopo STAIANO, Geoffrey SCOUTHEETEN et Patrick GALLINARI. “Data-QuestEval : A Referenceless Metric for Data to Text Semantic Evaluation”. In : *The 2021 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing*. 2021. **core ranking : A, 17.9% acceptance rate**

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- [Tam+16a] Lynda TAMINE et **LAURE SOULIER**. “Collaborative Information Retrieval : Concepts, Models and Evaluation”. In : *The 38th European Conference on IR Research, ECIR*. 2016, p. 885-888.
- [Tam+16b] Lynda TAMINE et **LAURE SOULIER**. “Collaborative Information Retrieval : Frameworks, Theoretical Models, and Emerging Topics”. In : *The 2016 ACM on International Conference on the Theory of Information Retrieval, ICTIR*. 2016, p. 7-8.

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- [Bel+19] Patrice BELLOT et **LAURE SOULIER**, éd. *Conférence en Recherche d’Informations et Applications - CORIA*. ARIA, 2019.
- [Bel+18] Patrice BELLOT, Chiraz TRABELSI, Josiane MOTHE, Fionn MURTAGH, Jian-Yun NIE, **LAURE SOULIER**, Eric SANJUAN, Linda CAPPELLATO et Nicola FERRO, éd. *The 9th International Conference of the CLEF Association, CLEF 2018*. T. 11018. Lecture Notes in Computer Science. Springer, 2018.
- [Cap+18] Linda CAPPELLATO, Nicola FERRO, Jian-Yun NIE et **LAURE SOULIER**, éd. *Working Notes of CLEF 2018 - Conference and Labs of the Evaluation Forum*. T. 2125. CEUR Workshop Proceedings. CEUR-WS.org, 2018.
- [Azz+17a] Leif AZZOPARDI, Jeremy PICKENS, Chirag SHAH, **LAURE SOULIER** et Lynda TAMINE. “Report on the Second International Workshop on the Evaluation on Collaborative Information Seeking and Retrieval (ECOL’2017@CHIIR)”. In : *SIGIR Forum* 51.3 (2017), p. 122-127.

- [Azz+17b] Leif AZZOPARDI, Jeremy PICKENS, Chirag SHAH, **LAURE SOULIER** et Lynda TAMINE. “Second International Workshop On the Evaluation of Collaborative Information Seeking and Retrieval (Ecol’17)”. In : *The 2017 Conference on Conference Human Information Interaction and Retrieval, CHIIR*. 2017, p. 429-431.
- [Lau+16c] **LAURE SOULIER**, Lynda TAMINE, Tetsuya SAKAI, Leif AZZOPARDI et Jeremy PICKENS. “Report on the First International Workshop on the Evaluation on Collaborative Information Seeking and Retrieval (ECol’2015)”. In : *SIGIR Forum* 50.1 (2016), p. 42-48.
- [Azz+15a] Leif AZZOPARDI, Jeremy PICKENS, Tetsuya SAKAI, **LAURE SOULIER** et Lynda TAMINE. “ECol 2015 : First international workshop on the Evaluation on Collaborative Information Seeking and Retrieval”. In : *The 24th ACM International Conference on Information and Knowledge Management, CIKM*. 2015, p. 1943-1944.
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Workshop articles

- [Erb+21b] Pierre ERBACHER, **LAURE SOULIER** et Ludovic DENOYER. “State of the Art of User Simulation approaches for conversational information retrieval”. In : *Sim4IR : Workshop on Simulation for Information Retrieval Evaluation at SIGIR*. 2021.
- [Ais+18] Wafa AISSA, **LAURE SOULIER** et Ludovic DENOYER. “A Reinforcement Learning-driven Translation Model for Search-Oriented Conversational Systems”. In : *The 2nd International Workshop on Search-Oriented Conversational AI, SCAI@EMNLP*. 2018, p. 33-39. **prix meilleur papier**
- [Car+18a] Micael CARVALHO, Rémi CADÈNE, David PICARD, **LAURE SOULIER** et Matthieu CORD. “Images and Recipes : Retrieval in the Cooking Context”. In : *34th IEEE International Conference on Data Engineering Workshops, ICDE Workshops 2018*. 2018, p. 169-174.
- [Ngu+16] Gia-Hung NGUYEN, Lynda TAMINE, **LAURE SOULIER** et Nathalie BRICON-SOUF. “Toward a Deep Neural Approach for Knowledge-Based IR”. In : *CoRR* abs/1606.07211 (2016). URL : <http://arxiv.org/abs/1606.07211>.

Evaluation campaign

- [Hai+22] Nam Le HAI, Thomas GERALD, Thibault FORMAL, Jian-Yun NIE, Benjamin PIWOWARSKI et **LAURE SOULIER**. “MLIA-DAC@TREC-CAST2022 : Contextualizing SPLADE for Conversational Information Retrieval”. In : *Working Notes of TREC CAST 2022* (2022).
- [Ast+21] Nawel ASTAOUTI, Thomas GERALD, Maya TOUZARI, Jian-Yun NIE et **LAURE SOULIER**. “MLIA-LIP6@TREC-CAST2021 : Feature augmentation for query recontextualization and passage ranking”. In : *Working Notes of TREC CAST 2021*. 2021.
- [Zab+17] Eloi ZABLOCKI, Patrick BORDES, **LAURE SOULIER**, Benjamin PIWOWARSKI et Patrick GALLINARI. “LIP6@CLEF2017 : Multi-Modal Spatial Role Labeling using Word Embeddings”. In : *Working Notes of CLEF 2017 - Conference and Labs of the Evaluation Forum*. 2017.
- [Jab+16a] Lamjed Ben JABEUR, **LAURE SOULIER**, Paul MOUSSET et Lynda TAMINE. “Living Ranking : from Online to Real-time Information Retrieval Evaluation”. In : *Working Notes of CLEF 2016 - Conference and Labs of the Evaluation forum*. 2016, p. 587-588.
- [Che+15] Abdelhamid CHELLAL, Lamjed Ben JABEUR, **LAURE SOULIER**, Bilel MOULAHI, Thomas PALMER, Mohand BOUGHANEM, Karen PINEL-SAUVAGNAT, Lynda TAMINE et Gilles HUBERT. “IRIT at TREC Microblog 2015”. In : *The Twenty-Fourth Text REtrieval Conference, TREC*. 2015.
- [Jab+15] Lamjed Ben JABEUR, **LAURE SOULIER** et Lynda TAMINE. “IRIT at CLEF 2015 : A Product Search Model for Head Queries”. In : *Working Notes of CLEF 2015 - Conference and Labs of the Evaluation forum*. 2015.

National conferences

- [Erb+23] Pierre ERBACHER, Philippe PREUX, Jian-Yun NIE et **SOULIER, LAURE**. “Augmentation de jeux de données RI pour la recherche conversationnelle à initiative mixte”. In : *18e Conférence en Recherche d’Information et Applications – 16e Rencontres Jeunes Chercheurs en RI – 30e Conférence sur le Traitement Automatique des Langues Naturelles – 25e Rencontre des Étudiants Chercheurs en Informatique pour le Traitement Automatique des Langues*. ATALA, 2023, p. 37-58.
- [Fal+23] Louis FALISSARD, Vincent GUIGUE et **SOULIER, LAURE**. “Apprentissage de sous-espaces de préfixes”. In : *18e Conférence en Recherche d’Information et Applications – 16e Rencontres Jeunes Chercheurs en RI – 30e Conférence sur le Traitement Automatique des Langues Naturelles – 25e Rencontre des Étudiants Chercheurs en Informatique pour le Traitement Automatique des Langues*. ATALA, juin 2023, p. 59-73.
- [Dje+22c] Hanane DJEDDAL, Thomas GERALD, **LAURE SOULIER**, Karen PINEL-SAUVAGNAT et Lynda TAMINE. “Does Structure Matter ? Leveraging Data-to-Text Generation for Answering Complex Information Needs - Abstract”. In : *The 2nd Joint Conference of the Information Retrieval Communities in Europe (CIRCLE)*. T. 3178. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [Erb+22b] Pierre ERBACHER, Ludovic DENOYER et **LAURE SOULIER**. “Interactive Query Clarification and Refinement via User Simulation - Abstract”. In : *The 2nd Joint Conference of the Information Retrieval Communities in Europe (CIRCLE)*. T. 3178. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [Ger+22a] Thomas GERALD et **LAURE SOULIER**. “Continual Learning of Long Topic Sequences in Neural Information Retrieval - abstract”. In : *The 2nd Joint Conference of the Information Retrieval Communities in Europe (CIRCLE)*. T. 3178. CEUR Workshop Proceedings. CEUR-WS.org, 2022.
- [Erb+21a] Pierre ERBACHER et **LAURE SOULIER**. “État de l’art des approches de modélisation et de simulation utilisateur pour la recherche d’information conversationnelle”. In : *CORIA 2021 - Conférence en Recherche d’Informations et Applications*. 2021.
- [Lov+21a] Jesús LOVÓN-MELGAREJO, **LAURE SOULIER**, Karen PINEL-SAUVAGNAT et Lynda TAMINE. “Oubli catastrophique et approches neuronales pour la Recherche d’Information”. In : *CORIA 2021 - Conférence en Recherche d’Informations et Applications*. 2021.
- [Luk+21a] Thomas LUKA, **LAURE SOULIER** et David PICARD. “Apprentissage non supervisé de représentations de mots à l’aide de réseaux de convolution bilinéaires sur des caractères”. In : *CORIA 2021 - Conférence en Recherche d’Informations et Applications*. 2021. **prix meilleur papier**
- [Reb+20b] Clément REBUFFEL, **LAURE SOULIER**, Geoffrey SCOUTHEETEN et Patrick GALLINARI. “Capturing Entity Hierarchy in Data-to-Text Generative Models”. In : *The Joint Conference of the Information Retrieval Communities in Europe (CIRCLE 2020)*. 2020.
- [Bor+19b] Patrick BORDES, Eloi ZABLOCKI, **LAURE SOULIER**, Benjamin PIWOWARSKI et Patrick GALLINARI. “Un modèle multimodal d’apprentissage de représentations de phrases qui préserve la sémantique visuelle”. In : *Conférence en Recherche d’Informations et Applications - CORIA*. ARIA, 2019.
- [Reb19] Clément REBUFFEL. “Data-to-Text : Vers la génération de texte à partir de données non-linguistiques”. In : *Conférence en Recherche d’Informations et Applications - CORIA 2019*. ARIA, 2019.
- [Ngu+18b] Gia-Hung NGUYEN, Lynda TAMINE, **LAURE SOULIER** et Nathalie SOUF. “Modèle neuronal tripartite pour la représentation de documents”. In : *Conférence en Recherche d’Informations et Applications - CORIA*. 2018.
- [Ngu+17b] Gia-Hung NGUYEN, Lynda TAMINE, **LAURE SOULIER** et Nathalie BRICON-SOUF. “Modèle Neuronal de Recherche d’Information Augmenté par une Ressource Sémantique”. In : *Conférence en Recherche d’Informations et Applications - CORIA*. 2017, p. 265-280.
- [Lau+16a] **LAURE SOULIER**, Lamjed Ben JABEUR, Paul MOUSSET et Lynda TAMINE. “Quels facteurs de pertinence pour la recherche de produits ecommerce ?” In : *CORIA 2016 - Conférence en Recherche d’Informations et Applications*. 2016, p. 415-430.
- [Lau+15a] **LAURE SOULIER** et Lynda TAMINE. “Définition et exploitation des méta-rôles des utilisateurs pour la recherche d’information collaborative”. In : *CORIA 2015 - Conférence en Recherche d’Informations et Applications*. 2015, p. 107-122.

- [Lau+12b] **LAURE SOULIER**, Lamjed Ben JABEUR, Lynda TAMINE et Wahiba BAHSOUN. “Modèle de langue pour l’ordonnancement conjoint d’entités pertinentes dans un réseau d’informations hétérogènes”. In : *Actes du XXXème Congrès INFORSID*. 2012, p. 256-272.

Reports

- [Ovi+20] Sharon L. OVIATT et **LAURE SOULIER**. “Conversational Search for Learning Technologies”. In : *CoRR* abs/2001.02912 (2020). arXiv : [2001.02912](https://arxiv.org/abs/2001.02912). URL : <http://arxiv.org/abs/2001.02912>.

Habilitation

- [Lau23] **LAURE SOULIER**. *Neural Language Models for Faithful Data-to-Text Generation and Proactive Conversational Search*. 2023. URL : <https://tel.archives-ouvertes.fr/tel-04040213>.

Distinctions and Awards

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|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2021 | Best paper award for the national conference <i>CO</i> nférence en Recherche d’Information et Applications (<i>CORIA</i>) [Luk+21a] |
| 2018 | Best paper award of the SCAI workshop (<i>SCAI@EMNLP2018</i>) [Ais+18] |
| 2015 | Best paper award for the national conference <i>CO</i> nférence en Recherche d’Information et Applications (<i>CORIA</i>) [Lau+15a] |
| 2014 | ELIAS grant for organizing workshop on evaluation for collaborative information retrieval (ECol 2015 [Lau+16c] et 2017 [Azz+17b]). Grant : 10 000 € |
| 2013 | Best paper award for the international conference <i>Asia Information Retrieval Societies (AIRS)</i> [Lau+13b] |