

# Nelly Barret

ASSISTANT PROFESSOR AT INSA LYON AND LIRIS

**Blaise Pascal building, 7 Avenue Jean Capelle, 69100 Villeurbanne, France**

Office 502.3.21 | [nelly.barret@insa-lyon.fr](mailto:nelly.barret@insa-lyon.fr) | <https://orcid.org/0000-0002-3469-4149>



## Research interests

I work in the broad field of data management, and more precisely my research interests focus on heterogeneous and/or multimodal data, data integration systems, and data exploration. Recently, I also added Federated Learning to my research interests. The projects that I worked on have always been part of multidisciplinary contexts, including urban planning, journalism, and health, and have been exemplified on large, complex, and often real-world data.



## Academic positions

2025 - now	Assistant Professor   INSA Lyon & LIRIS (FR)
2024 - 2025	Postdoctoral researcher   Politecnico di Milano (IT)
2021 - 2024	PhD student   Institut Polytechnique de Paris & Inria Saclay (FR)
2020 - 2020	Master intern   LIRIS (FR)
2018 - 2018	Bachelor intern   LIRIS (FR)



## Education

2021 - 2024	PhD degree   Institut Polytechnique de Paris
2018 - 2020	Master's degree   Université Claude Bernard Lyon 1
2015 - 2018	Bachelor's degree   Université Claude Bernard Lyon 1



## Research visits

Institut de Recherche en Informatique de Toulouse (Oct. 2025 (2 days))



## Awards

PhD thesis award (Oct. 2024)



## Research projects

BETTER: real-world health-data distributed analytics research platform (Apr. 2024 – July 2025), CONNECTIONSTUDIO: user data exploration of heterogeneous data (March 2023 – March 2024), PATHWAYS: find interesting entity-to-entity paths in heterogeneous data (May 2022 – March 2024), ABSTRA: Entity-Relationship summaries from semi-structured data (Jan. 2021 – March 2024), PREDIHOOD: supervised prediction of the environment of neighborhoods (Feb. 2020 – July 2020), GEOALIGN: matching and merging geographic entities (Jan. 2019 – June 2019), VIZLIRIS: recommending and clustering French neighborhoods (May 2018 – July 2018),



## Research software and tools

---

I-ETL (Apr. 2024 – July 2025), ConnectionStudio (March 2023 – March 2024), PathWays (May 2022 – March 2024), Abstra (Jan. 2021 – March 2024), Predihood (Feb. 2020 – July 2020), GeoAlign (Jan. 2019 – June 2019), VizLIRIS (May 2018 – July 2018)



## Working groups

---

Commission égalité & parité femme-homme (Nov. 2025 – now), Diversity, Equity and Inclusion (Apr. 2023 – now), FAIRification of genomic annotations (Dec. 2024 – now)



## Publications

---

My complete list of publications is available on my [ORCID record](#).



## Professional service

---

**Conference and workshop organizer:** CORIA-TALN (Conférence en Recherche d'Information et Applications - Traitement Automatique des Langues Naturelles): 2027

**Conference and workshop chair:** LS (Conceptual Modeling for Life Sciences workshop): 2025

**Conference program committee member:** CDE (International Conference on Data Engineering): 2025 (reviewer), iSE (Conference on Advanced Information Systems Engineering): 2025 (reviewer), DR (Conference on Innovative Data systems Research): 2023 (reviewer), BT (Extending DataBase Technology): 2023 (reviewer), AILS (Information Systems and AI for Life Sciences workshop): 2025, D (Transforming Graph Data workshop): 2026, WE (International Conference on Web Engineering): 2021 (reviewer), IS (Research Challenges in Information Science): 2026 (forum), BIS (Advances in DataBases and Information Systems): 2026, 2025, DBKDA (Databases, Knowledge, and Data Applications): 2025, BDA (Gestion de Données – Principes, Technologies et Applications): 2025 (demonstrations only),

**Journal review board member:** LDB (Very Large DataBases): 2026

**Journal reviewer:** MC Bioinformatics: 2025, MC Medical informatics and Decision Making: 2024, igaScience: 2025, LoS One: 2024, cientific Reports: 2024, DIQ (Journal of Data and Information Quality): 2025, MC (Computers, Materials and Continua): 2025, JOSS (Journal of Open Source Software): 2025,



## Institutional responsibilities

---

2026 - now	<b>GRID500 platform LIRIS referent   main maintainer</b>
2025 - now	<b>DRIM webpage maintainer   main maintainer</b>
2024 - 2025	<b>LinkedIn page maintainer   main maintainer</b>
2023 - 2024	<b>PhD representative   main representative</b>

2021 - 2024    **Team seminar organizer | main organizer**

2021 - 2021    **Internship application website contributor | active contributor**



## Talks

---

My complete list of talks on my [ZENODO record](#).



## Teaching responsibilities

---

**Recurring courses:** ISN1: informatique et société numérique (fall, INSA Lyon, engineer 1st year, in French), SOL: systèmes et outils logiciels (fall, INSA Lyon, engineer 1st year, in French),

**Involvement in teaching teams:** ISN2: new project topic, ISN2: network module redesign, CGA: member of the Animation and Management Committee (Comité de Gestion et d'Animation),

**Previous courses:** CSE203: CS project (spring 2024, Ecole Polytechnique, bachelor 2nd year, in English), CSE204: Machine Learning (spring 2023, Ecole Polytechnique, bachelor 2nd year, in English), INF411: bases de programmation et d'algorithmique (fall 2022, Ecole Polytechnique, engineer 2nd year, in French), INF371: mécanismes de la programmation orientée objet (spring 2022, Ecole Polytechnique, engineer 1st year, in French),



## Advising

---

**Master students:** Ahmed Bel Hadj Youssef on "Construction automatique de domaines dans les data meshes" (fall 2025, INSA Lyon, engineer 5th year), Antoine Gauquier on "Path exploration of ConnectionLens graphs" (summer 2022, IMT Nord-Europe, master 1st year),

**Bachelor students:** Shay Pripstein on "Target data acquisition in open repositories" (winter 2023, École Polytechnique, bachelor 3rd year), Tudor Enache on "From simple to property graphs" (winter 2023, École Polytechnique, bachelor 3rd year), Nikola Dobricic on "Graph queries for abstractions" (summer 2023, Ecole Polytechnique, bachelor 2nd year), Jia-Jean Law on "Optimization of entity-to-entity data paths" (winter 2022, Ecole Polytechnique, bachelor 3rd year),