

# Nelly Barret

PhD student in CEDAR team at INRIA

---

16b rue Ampère, 91300 Massy  
07 69 90 95 01 — [nelly.barret@inria.fr](mailto:nelly.barret@inria.fr) — Driving licence  
[nellybarret.fr](https://nellybarret.fr) — [nelly-barret](#) — [ORCID](#)

## Education

---

### PhD degree, Computer science track

Jan. 2021 - Dec. 2023

*Institut Polytechnique de Paris and Inria Saclay*

*Palaiseau*

- PhD title: “User-oriented exploration of heterogeneous data”
- keywords: semi-structured data, Entity-Relationship schema, user interface
- technologies: Java, SQL, PostgreSQL and Maven
- PhD student activities: give talks various audiences, attend and present my research in conferences, teaching (Java and Machine Learning labs), attend scientific and transversal training

### Computer Science Master, Artificial Intelligence track

2018 - 2020

*University Lyon I*

*Villeurbanne*

- courses on cognition and intelligence, data cleaning, machine learning, neural networks and computer environments for human learning
- projects: data mining for predicting cardiovascular diseases, [data visualization](#) about the evolution of programming languages, analysing activity from Twitch users

### Computer Science Bachelor

2015 - 2018

*University Lyon I*

*Villeurbanne*

- courses on web programming, databases, algorithmic and networks
- project: [interactive map of Lyon](#) for recommending pubs and restaurants with Google and Yelp

### Scientific Baccalaureate

2012 - 2015

*High school Blaise Pascal*

*Charbonnières-les-bains*

## Scientific publications

---

My publications are all available on [my ORCID](#).

Selected publications:

Barret, Nelly, Ioana Manolescu, and Prajna Upadhyay. “Computing generic abstractions from application datasets”. In: *EDBT*. 2024.

Barret, Nelly, Simon Ebel, et al. “User-friendly exploration of highly heterogeneous data lakes”. In: *CoopIS*. 2023.

Barret, Nelly, Antoine Gauquier, et al. “Exploring heterogeneous data graphs through their entity paths”. In: *ADBIS*. 2023, pp. 163–179.

## Research experience

---

**Internship: predicting the environment of a neighbourhood with Predihood** Feb. - July 2020  
*LIRIS* *Villeurbanne*

- draw up a state of the art about prediction techniques
- propose solutions to scientific challenges: an algorithm and heuristics to select relevant features
- exchange with the social science researchers in the project

**Master project: matching and fusion of geographic entities with GeoAlign** Jan. - June 2019  
*LIRIS* *Villeurbanne*

- integrate heterogeneous cartographic data from Geonames, Bing, Here and OSM
- propose a customizable formula to detect correspondences and merge them
- develop an interface to detect and merge correspondences between point of interest

**Internship: comparison/recommendation of neighbourhoods with VizLiris** May - July 2018  
*LIRIS* *Villeurbanne*

- draw up a state of the art on recommending techniques
- use prediction and clustering algorithms
- develop a Web interface to facilitate comparison and recommendation of neighbourhoods in France

## Work experience

---

**Seasonal contracts** Summers 2016 - 2019

- factory worker at Metaldyne, temporary worker at University of Lyon and vendor at Bershka

**Volunteering - female gymnastics instructor** 2010 - 2017  
*Le Cran de Tassin* *Tassin*

- lead a gymnastics class with 25 young gymnasts in competition

## Skills

---

<b>Programming languages</b>	Java, Python, Bash, Prolog, C/C++, PHP
<b>Frameworks</b>	Scikit-learn, Flask, Bootstrap, Spring, D3.js,
<b>Web</b>	HTML, CSS, JavaScript
<b>Databases</b>	MySQL, PostgreSQL, MongoDB
<b>Tools</b>	Git, Shell, Maven, JMerise, UMLet
<b>Languages</b>	French (native), English (professional)
<b>Soft skills</b>	dynamism, teamwork, pedagogy

## Leisures

---

- participation in 3 editions of the [Nuit de l'Info](#) as leader of my team and Web developer
- puzzles
- side-car demonstrations on tracks