

# Rémi Morvan

Database Researcher



“After four years advancing database theory, I want to apply it to real-world systems.” ”

✉ remi@morvan.xyz

🌐 remimorvan

🔗 morvan.xyz

## AWARDS

🏆 **DISTINGUISHED PAPER AWARD** at PODS '25 for *Minimization of Conjunctive Regular Path Queries*.

🏆 **SELECTED PAPER** at ICDT '23 for *Approximation and Semantic Tree-width of Conjunctive Regular Path Queries*.

## TECH STACK

🐍 Python

🐪 OCaml

© C

🦄 Perl

SQL

📖 JavaScript & TypeScript

HTML

TeX

🔠 Typst

## LANGUAGES

**FRENCH:** mother tongue.

**ENGLISH:** mastery (level C2, Cambridge Advanced).

## SOFT SKILLS

PROBLEM SOLVING

INFORMATION SYNTHESIS

TEAMWORK



## PROFESSIONAL EXPERIENCE

Sept. 2021 – Aug. 2025 · LaBRI, Université de Bordeaux

### PH.D. RESEARCHER

- Research projects in **database theory** (graph database query optimization) and **automata theory** (model-checking of infinite structures). 6 publications and 24 seminars. **query optimization**
- Main organiser** and founder of a **three-day workshop ATLAS '24** 🗓. Member of the organising committee of several conferences. **event organization**
- Supervisor** of two interns. **student supervision**

Sept. 2021 – Aug. 2025 · Université de Bordeaux & Enseirb-Matmeca

### TEACHER

**240 hours of teaching** in Bachelor's and Master's programmes. Topics: **programming** (C & JavaScript), **machine learning**, **databases**, **automata** & **logic**.

Sept. 2020 – June 2021 · Lycée Saint-Louis (Paris)

### ORAL EXAMINER IN MATHEMATICS



## EDUCATION

Sept. 2021 – Aug. 2025 · Université de Bordeaux

### PH.D. IN COMPUTER SCIENCE 📄

Title: *“Homomorphism Problems in Graph Databases and Automatic Structures”*. Supervised by Diego Figueira and Nathanaël Fijalkow (LaBRI, CNRS).

Sept. 2017 – Aug. 2021 · École Normale Supérieure Paris-Saclay

### MASTER'S IN MATHEMATICS AND COMPUTER SCIENCE

- ENS Paris-Saclay diploma (civil-servant student) · 2021
- Parisian Master of Computer Science** · Université Paris-Cité, 2021
- “Agrégation” of Mathematics** & Master's of Higher Education in Mathematics · Université Paris-Saclay, 2020



## SOFTWARE PROJECTS

since May 2024 · **PYSEMIGROUP 2.0** 🔄

**Collaborative database project** dedicated to **visualizing** and comparing research results in *automata theory*. I mostly dealt with **knowledge representation**. Project leader: Charles Paperman. **Python** **Pydantic** **FastAPI**

since Feb. 2022 · **KNOWLEDGE-CLUSTERING** 🔄

LaTeX command-line writing assistance tool. **Creator and main developer**.

**Python** **Clustering** **Natural Language Processing** **LaTeX**



## ASSOCIATIVE & ELECTORAL ENGAGEMENT

Dec. 2023 – Aug. 2025 · LaBRI

### MEMBER OF LABRI'S SCIENTIFIC COUNCIL

Dec. 2021 – Nov. 2022 · AFoDIB

**PRESIDENT** **event organization** **communication** **funding application**

Association of Computer Science Ph.D. Students in Bordeaux. I was also **secretary** (Dec. 2020 – Nov. 2021) and **member of the board** (Dec. 2022 – Nov. 2023).

