Alexandre Vigny

Postdoctoral Researcher

In logic, graph / database theory,
& parametrized complexity.

📇 14 February 1992

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About me

I am currently doing a postdoc at the University of Bremen, in the team of Sebastian Siebertz.

At the moment, we are primarily working on tractable algorithms for sparse classes of graphs.

Before that I was a postdoc at the University of Warsaw, working with Mikołaj Bojańczyk and Szymon Toruńczyk.

A couple of years earlier, I was a Ph.D. student in University Paris Diderot, Paris VII under the guidance of Arnaud Durand and Luc Segoufin. I worked on nowhere dense classes of graphs and the evaluation of first-order queries.

Generally speaking, my research interests lie in the intersection of logic and graph theory.

Spoken Languages

- French (Native Speaker)
- English (Proficient)
- German (Beginner)

Positions

Since Nov. 2019	Postdoc With Sebastian Siebertz.	University of Bremen, Germany
Nov. 2018 - Sep. 2019	Postdoc With Mikołaj Bojańczyk and Szymon Toruńczyk.	University of Warsaw, Poland
Oct. 2015 - Sep. 2018	Ph.D. student Supervised by Arnaud Durand and Luc Segoufin.	Université Paris Diderot, France
May. 2015 - Sep. 2015	Trainee Supervised by Luc Segoufin.	ENS Cachan, France

Publications

Published

2020	Elimination Distance to Bounded Degree on Planar Graphs. Together with Alexander Lindermayer and Sebastian Siebertz.	MFCS'20
2018	Query Enumeration and Nowhere Dense Graphs. Supervised by Arnaud Durand and Luc Segoufin.	PhD Thesis
2018	Enumeration for FO Queries over Nowhere Dense Graphs. Together with Nicole Schweikardt and Luc Segoufin.	PODS'18
2017	Constant Delay Enumeration for FO Queries over Databases with Local Bounded Expansion. Together with Luc Segoufin.	ICDT'17

Under Review

2020+	Dynamic Query Evaluation Over Structures with Low Degree. Solo work
2020+	Distributed Domination on Graph Classes with Bounded Expansion. Together with Simeon Kublenz and Sebastian Siebertz.

Notable Events

15/03/2020	Dagstuhl Seminar 20121 "Sparsity in Algorithms, Combinatorics and Logic"	Rescheduled
28/10/2019	Lecturer in the colloquium "Facets of Complexity"	Berlin, Germany
19/05/2019	Dagstuhl Seminar 19211 "Enumeration in Data Management"	Dagstuhl, Germany
08/03/2018	Event: "Ma thèse en 180 secondes" Explain your thesis to a jury of non specialists in less than 3 minutes.	Paris, France

Teaching

2019-2021	Creation of syllabuses (master level) Graph theory, set and model theory, parametrized complexity, etc.	University of Bremen, Germany
2015-2018	Tutorials and labs (undergrad level): Java programming, automata, algorithms, databases, etc.	Université Paris Diderot, France

Miscellaneous

Involvement in the life of the lab

- PhD representative in charge of supply management.
- Co-organizer of a weekly informal seminar for PhD students.
- Organizer of a weekly social event for PhD students.

Hobbies

I swim, sail, climb, play board games and bridge.