

# Antoine Amarilli

Associate Professor in Data Management

Born on February 7th, 1990, in Colmar (68), France

Télécom ParisTech  
46 rue Barrault  
F-75634 Paris Cedex 13  
☎ +33 1 45 81 77 59  
✉ a3nm@a3nm.net  
🌐 <https://a3nm.net>

## Career and Education

- 2016– **Tenured associate professor in data management**, Télécom ParisTech, DBWeb team.
- 2013–2016 **PhD on “Leveraging the Structure of Uncertain Data”**, Télécom ParisTech.  
Supervised by Pierre Senellart, defended on March 14th, 2016 (*mention très honorable*)
- 2012 **Computer science research master (MPRI)**, École normale supérieure.  
*Mention très bien* (very good), ranked 5<sup>th</sup> of 58 students. M2 research internship with Pierre Senellart
- 2010 **Computer science licence**, École normale supérieure. *Mention très bien*.
- 2007–2009 **Classes prépa MPSI-MP\***, Lycée Kléber, Strasbourg.  
Admitted to the École normale supérieure in computer science, ranked 2<sup>nd</sup>.
- 2007 **Scientific Baccalauréat**, Lycée des Pontonniers, Strasbourg. *Mention très bien*.

## Selected Publications

- ICALP’17** Antoine Amarilli, Pierre Bourhis, Louis Jachiet, Stefan Mengel.  
*A Circuit-Based Approach to Efficient Enumeration.*
- PODS’17** Antoine Amarilli, Mikaël Monet, Pierre Senellart.  
*Conjunctive Queries on Probabilistic Graphs: Combined Complexity.*
- ICDT’17** Antoine Amarilli, Pierre Bourhis, Mikaël Monet, Pierre Senellart.  
*Combined Tractability of Query Evaluation via Tree Automata and Cycluits.*
- ICDT’17** Antoine Amarilli, Yael Amsterdamer, Tova Milo, Pierre Senellart.  
*Top-k Queries on Unknown Values under Order Constraints.*
- WSDM’17** Luis Galárraga, Simon Razniewski, Antoine Amarilli, Fabian M. Suchanek.  
*Predicting Completeness in Knowledge Bases.*
- IJCAI’16** Antoine Amarilli, Michael Benedikt, Pierre Bourhis, Michael Vanden Boom.  
*Query Answering with Transitive and Linear-Ordered Data.*
- PODS’16** Antoine Amarilli, Pierre Bourhis, Pierre Senellart.  
*Tractable Lineages on Treelike Instances: Limits and Extensions.*
- US Patent** Antoine Amarilli, Mehryar Mohri, Cyril Allauzen.  
*Minimum Bayesian Risk Methods for Automatic Speech Recognition.*
- IJCAI’15** Antoine Amarilli, Michael Benedikt.  
*Combining Existential Rules and Description Logics.*
- LICS’15** Antoine Amarilli, Michael Benedikt.  
*Finite Open-World Query Answering with Number Restrictions.*
- ICALP’15** Antoine Amarilli, Pierre Bourhis, Pierre Senellart.  
*Provenance Circuits for Trees and Treelike Instances.*
- ICDT’14** Antoine Amarilli, Yael Amsterdamer, Tova Milo.  
*On the Complexity of Mining Itemsets from the Crowd Using Taxonomies.*

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## Main Research Visits Abroad

- 2013 Visit at the **University of Oxford** with **Michael Benedikt** (5 months).
- 2013 Visit at **Tel Aviv University** with **Tova Milo** (3 months).
- 2011 Internship at **Google NYC** supervised by **Cyril Allauzen** (4 months).

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## Main Teaching Activities

- 2016–2017 **Web Data Management**,  
Developed and taught classes about Web technologies (12 hours/year), 60 students.
- 2015–2017 **Uncertain Data Management**, *M2 Data and Knowledge, Université Paris-Saclay*,  
Developed and taught the class with Silviu Maniu (12 hours/year, 2 years, ≈30 students/year).
- 2012–2017 **Programming project: practical problems and contests**, *Télécom ParisTech*,  
Master level; developed some slides, responsible for a group (24 hours/year, 4 years, ≈25 students/year). Responsible for the whole class since 2016–2017 (76 students).
- 2012–2017 **Formal language theory**, *Télécom ParisTech, mandatory 1<sup>st</sup> year class*,  
Responsible for a group : classes, labs, tutorials (16.5 hours/year, 4 years, ≈30 students/year).
- 2012–2015 **Web Technologies**, *COMASIC Master (Polytechnique, Télécom, ENSTA ParisTech)*,  
Fully developed and taught the class (12 hours/year, 2 years, ≈10 students/year).
- 2014, 2016 **Coach for the ACM ICPC SWERC programming contest**, *Télécom ParisTech*,  
Supervision of Télécom ParisTech students at the SWERC contest (Porto, Portugal).

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## Reviewing

- PC Member BDA'18, ICDT'18, SUM'16, BDA'16 (demos)
  - Journal *VLDB Journal, Journal of Logic and Computation, Review of Symbolic Logic*,  
refereeing *Distributed and Parallel Databases*
- Misc reviews ICDT'17, PODS'16, ICDE'15, LATIN'14, SIGMOD'13

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## Public Talks

I have given the following public talks:

- 16 talks at national and international conferences and workshops, including one best talk award at Highlights'16 (5 recipients among 73 talks)
- 8 talks in French team seminars, excluding 7 talks in my own institutions
- 4 talks in research teams and project meetings abroad, including one Dagstuhl seminar (14331)

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## Languages

- French Mother tongue. *Placed second at the Dictée ECE 2012 and first (by school team) in 2016.*
- English Fluent. *IGCSE diploma. International option for the Baccalauréat.*
- German High school level. *Studied as a second language for 10 years.*

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## Awards

- 2017 Placed first at the Télécom ParisTech PhD prize.
- 2015 Placed first at the Google Hash Code programming contest.
- 2010 and 2011 Silver medal at the SWERC (ACM ICPC selection contest for Southwestern Europe).
- 2008 Placed first at Prologin, the French national computer science contest.
- 2007 First *accessit* of the *Concours général* in philosophy (French high school national contest).