

Karim ALAMI

41, rue du général Bordas, appt 98

33400 Talence

☎ 07 61 57 53 48

PhD Candidate in Computer Science at LaBRI CNRS, Université de Bordeaux. Working on optimization of preference queries/data filtering in high dimensionality/cardinality, and dynamicity.

✉ karim.alami@u-bordeaux.fr

29 years old

University Course

2017 – **PhD in Computer Science**, LaBRI CNRS, Université de Bordeaux, FRANCE.
sept./oct.
2020

2016 – 2017 **Research Master in Data and Information Systems**.
Université Clermont Auvergne, FRANCE

2010 – 2013 **Engineering degree in Computer science**.
ENSIAS, Université Mohamed 5, MOROCCO

Research Experience

October 2017 – **PhD thesis in Data Science at LaBRI CNRS, Université de Bordeaux**.

September 2020 Topic: “*Optimizing Skyline queries in dynamic contexts*”, advised by Sofian Maabout.
We design algorithms and data structures able to deal with changes in data semantics for accelerating the processing of skyline queries.

Softwares made during the thesis (available on GitHub): NSC, MSSD, dySky.

- NSC. Fastly Maintainable Index structure in presence of dynamic data
 - MSSD. A framework for streaming data
 - dySky. A Highly Parallelizable algorithm in case of dynamic orders
- Stack: C++, OpenMP, Spark Streaming, Python.

Published papers (short list):

- The Negative Skycube (**Information Systems journal**)
- A Framework for Skyline Queries Over Streaming Data (**Data and Knowledge Engineering journal**)

March 2017 – **Research Internship for Master degree at LIMOS CNRS**.

July 2017 Topic: “*Generation and Querying of Evolving Graphs*”, advised by R. Ciucanu & E. Mephu Nguifo.
Software (available on GitHub):

- EGG. Stack: Python, Scipy lib.

Published papers (short list):

- EGG: A Framework for Generating Evolving RDF Graphs (**ISWC 2017**)

Industrial Experience

Dec. 2013 – **Integration and maintenance Engineer**, Capgemini .

Jan. 2016 Automation and scheduling of processes. Stack: Perl, Autosys scheduler, SQL Server

Jan. 2016 – **Integration and maintenance Engineer**, AXA Technology Services.

Aug. 2016 Automation and scheduling of processes. Stack: Perl, Tivoli Workload Scheduler (TWS), SQL Server

Teaching Experience

2018 – 2019 **University of Bordeaux**.

- Linux initiation (IUT 1st year)
- Oracle DBMS administration(IUT 2nd year)
- Advanced principles in relational databases. (Master 1st year)

2019 – 2020 **University of Bordeaux**.

- Algorithms and data structure. (Licence 2nd year)
- Advanced principles in relational databases. (Master 1st year)

Scientific Skills

Data management, Algorithms, Complexity theory, Data mining, Machine learning, Semantic Web, Graphs.

Technical Skills

OS	Linux (LPI 1 certification).
Programming (ordered by experience)	C++, Python, Java, Perl, C, JavaScript.
DB Systems	Relational (PostgreSQL, Oracle, MySQL), NoSQL (Neo4j, MongoDB, JSON, RDF, XML) & Distributed (Hive).

Social activities

Secretary of AFODIB, *Association of doctoral students in computer science of Bordeaux.*
Workshops, *Supervising Maths à Modeler workshops*, *Introducing Algorithms to middle school students..*

Language Skills

English	TOEIC Score: 915/990, Level: C2.
French/Arabic	Native.

Web profile

Personal website	https://karimalami7.github.io/.
LinkedIn	https://www.linkedin.com/in/karim-alami-44042b62/.
GitHub	https://github.com/karimalami7.
ResearchGate	https://www.researchgate.net/profile/Karim_Alam.