# **Federico Olmedo**

## **Curriculum Vitae**



## Personal information

Surname, first name | Olmedo, Federico

Address | IMDEA Software Institute

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Nationality | Argentine.

Date of birth | 24<sup>th</sup> April, 1983.

Place of birth Rosario, Argentina.

Marital status | Single.

### **Education**

Date | From 2009 onwards

Degree to be awarded | PhD in Computer Science.

Supervisor | Gilles Barthe.

Research Interests | My main research topic is the application of formal methods to

verify security properties of computer systems. The areas I am most interested in are cryptography and language-based security, theorem provers, programming language semantics and program

verification.

Affiliation | IMDEA Software Institute, Spain.

Date | 2001 - 2008

Degree awarded | Licentiateship in Computer Science (5 years)

Name of institution | Rosario National University, Argentina.

Date | 1996 - 2000

Degree awarded | High School Degree with specialisation in Electronics.

Superior Polytechnic Institute

Name of institution Rosario National University, Argentina.

## Work experience

Date 2004, second semester.

Type of business or sector | Teaching.

Position held Honorary teaching assistant in the course of Mathematical

Analysis IV.

Name of employer | Faculty of Exact Sciences, Engineering and Land Surveying

Rosario National University, Argentina.

Date | 2005 - 2008.

Type of business or sector | Teaching.

Position held | Teaching assistant in the following courses:

Introduction to Informatics

Analysis of Programming Languages I

Logic and Algorithms

Mathematical Analysis IV

Name of employer Faculty of Exact Sciences, Engineering and Land Surveying

Rosario National University, Argentina.

## Languages

Mother tongue | Spanish

Other languages | English

Advanced skills at writing, speaking and reading comprehension. Taken the First Certificate in English examination from University of Cambridge.

French

Intermediate skills.

### Additional information

Internship

INRIA - Sophia Anthipolis, France.

Remunerated internship, 12/2007-05/2008

Formal verification of the FDH signature scheme.

Supervisor: Gilles Barthe.

**Publications** 

- G. Barthe, F. Olmedo. Beyond Differential Privacy: Composition Theorems and Relational Logic for f-divergences between Probabilistic Programs. To appear in 40th International Colloquium on Automata, Languages and Programming - ICALP 2013.
- G. Barthe, B. Grégoire, S. Heraud, F. Olmedo, S. Zanella Béguelin. Verifiable Indifferentiable Hashing into Elliptic Curves. In 1st Conference on Principles of Security and Trust POST 2012.
- G. Barthe, B. Köpf, F. Olmedo, S. Zanella Béguelin. Probabilistic Relational Reasoning for Differential Privacy. In 39th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages - POPL 2012.
- G. Barthe, F. Olmedo, S. Zanella Béguelin. Verifiable Security

of Boneh-Franklin Identity-Based Encryption. In *5th* International Conference on Provable Security - ProvSec 2011.

S. Zanella Béguelin, G. Barthe, B. Grégoire, F. Olmedo.
Formally certifying the security of digital signature schemes.
In 30th IEEE Symposium on Security and Privacy - S&P 2009.

### References

- Gilles Barthe. Researcher at IMDEA Software, Spain. Email: Gilles.Barthe (at) imdea.org
- Boris Köpf. Researcher at IMDEA Software, Spain. Email: Boris.Koepf (at) imdea.org