# César Sabater - Currículum Vítae

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Nationality Argentina

### **Recent Positions**

March 2023 Post Doctoral Researcher

- present Institution: CNRS, INSA Lyon

Topic: Privacy and Security of Data-Processing Systems

Supervisor: Sonia Ben Mokhtar

Research Team: DRIM

July 2022 Post Doctoral Researcher

- March 2023 Institution: INRIA Lille - Nord Europe

Topic: Privacy preserving machine learning

Supervisor: Jan Ramon Research Team: MAGNET

### Education

January 2019 Ph.D. in Computer Science

- June 2022 Institution: INRIA Lille - Nord Europe

Defense date: June 20, 2022

Topic: Privacy preserving machine learning

Supervisor: Jan Ramon Research Team: MAGNET

March 2008 "Licenciado" Degree in Computer Science (Equivalent to a Master degree in France)

- April 2017 Qualification: Licenciado en Ciencias de la Computación

University: Universidad Nacional de Rosario (National University of Rosario)

Academic Average: 9.47 over 10 (top 5% of the class)

Graduation Thesis: Semi-Automatic Generation of Adaptive Codes Thesis work was produced at INRIA - CAMUS research team. Thesis Advisor: Cédric Bastoul, University of Strasbourg

Thesis Co-Advisor: Guillermo Luis Grinblat, University of Rosario.

2002-2007 Secondary School - Instituto Politécnico Superior "General San Martín"

Rosario, Santa Fe, Argentina

#### **Publications**

- 1. César Sabater, Florian Hahn, Andreas Peter, and Jan Ramon. Private sampling with identifiable cheaters. *Proceedings on Privacy Enhancing Technologies*, 2023(2), 2022
- 2. César Sabater, Aurélien Bellet, and Jan Ramon. An accurate, scalable and verifiable protocol for federated differentially private averaging. *Machine Learning*, pages 1–45, 2022
- 3. César Sabater and Jan Ramon. Zero knowledge arguments for verifiable sampling. In *NeurIPS 2021 Workshop Privacy in Machine Learning*, 2021
- 4. César Sabater, Aurélien Bellet, and Jan Ramon. Distributed Differentially Private Averaging with Improved Utility and Robustness to Malicious Parties. NeurIPS 2020 workshop on Privacy Preserving Machine Learning PriML and PPML Joint Edition, December 2020. Poster

- 5. César Sabater, Aurélien Bellet, and Jan Ramon. Échange de bruit corrélé pour le calcul distribué de moyenne avec garanties de confidentialité différentielle. In Conférence sur l'Apprentissage Automatique 2020, 2020
- 6. Maxime Schmitt, César Sabater, and Cédric Bastoul. Semi-automatic generation of adaptive code. In IMPACT, Seventh International Workshop on Polyhedral Compilation Techniques, 2017
- 7. Cédric Bastoul and César Sabater. Automatic generation of adaptive simulation codes. In SimRace, Conference on Numerical Methods and High Performance Computing for Industrial Fluid Flows, 2015
- 8. Ana Casali, Claudia Deco, Cristina Bender, Santiago Fontanarrosa, and César Sabater. Asistente para el depósito de objetos en repositorios con extracción automática de metadatos. In XV Simposio Internacional de Tecnologías de la Información y las Comunicaciones en la Educación SINTICE, pages 133-136, 2013

## Participation to Schools, Courses, Workshops and Conferences

#### March 9-10 2nd RedChain-Lab Workshop 2023 La Clusaz, France https://sites.google.com/view/red-chain-lab-laclusaz/ Participation: Speaker Jan 13 Workshop de la chaire Data et Services pour une Ville Durable (DSVD) 2023 Lyon, France https://sites.google.com/view/workshop-dsvd-2023/accueil Participation: Speaker June 23-24 ANR Privacy-Preserving Methods for Medical Research (PMR) Workshop 2022 2022 Lille, France https://project.inria.fr/anrpmr/project-meeting-23-24-06-2022/ Participation: (On-site) Presentation Dec 14 NeurIPS 2021 workshop on Privacy in Machine Learning (PriML) 2021 Virtual workshop https://priml2021.github.io/ Participation: Presentations via poster and video recording Oct 28 PPML Health Workshop 2021 2021 Lyon, France https://health-ppml.conf.citi-lab.fr/ Oct 27-28 ANR Privacy-Preserving Methods for Medical Research (PMR) Workshop 2021 2021 Lyon, France https://project.inria.fr/anrpmr/project-meeting-27-10-2021/ Participation: (On-site) Presentation Dec 6-12 Conference on Neural Information Processing Systems

#### 2020 Virtual conference

https://nips.cc/Conferences/2020

## December 11 NeurIPS 2020 workshop on Privacy Preserving Machine Learning - PriML and PPML Joint Edition

2020 Virtual workshop

https://ppml-workshop.github.io/ppml20/

Participation: Presentations via poster and video recording

#### ECML/PKDD Summer School (EPSS19) Sept 11-16

2019 Track: Machine Learning and Data Mining for Geo-Spatial Data/Volunteered Geographic Information.

Würzburg, Germany

https://ecmlpkdd2019.org/summerschool/

July 9-11 APVP 2019 - l'Atelier sur la Protection de la Vie Privée

2019 Cap Hornu, France

https://project.inria.fr/apvp2019/

Participation: Poster presentation

June 11-15 Summer School on real-world crypto and privacy

2018 Šibenik, Croatia

https://summerschool-croatia.cs.ru.nl/2018/

Jan-March Summer Scolarship at IMPA (National Institute of Pure and Applied Mathematics)

2012 Rio de Janeiro, Brazil

Course: Extremal And Probabilistic Combinatorics, Master Level

Grade: A-

Professor: Robert Morris (https://en.wikipedia.org/wiki/Robert\_Morris\_(mathematician))

Feb 2010 17<sup>ma</sup> Escuela de verano en Ciencias Informáticas. (17<sup>th</sup> Summer School of Computer Science)

Río Cuarto, Argentina

## Other Research and Industry Positions

Jan - Dec Research Engineer Position in Computer Science

2018 Institution: INRIA Lille - Nord Europe

Topic: "Privacy-friendly distributed Machine Learning"

Supervisors: Jan Ramon Research Team: MAGNET

2014 Research Internship at INRIA and University of Strasbourg (as part of my degree thesis)

Project: "Mixing Compiler Optimization and Numerical Analysis for Performance and Productivity"

Research Teams Involved: CAMUS (Compilation for Multicore Architectures) at Inria (French National Institute for Research in Computer Science and Automation)

and ICPS (Parallel and Scientific Computing) *University:* University of Strasbourg, Alsace, France

Internship Supervisor: Cédric Bastoul, University of Strasbourg.

Supported by the Inria Internships Program

2012 - 2013 Research Internship at CIFASIS-CONICET

Project: "Automatic and Metadata Extraction and Easy Submission Workflow of Publications for

Open Access academic Repositories" Institution: CIFASIS-CONICET

(International French-Argentine Center of Information Sciences and Systems)

Supervisor: Ana Casali, Head of the Computer Science Department, Universidad Nacional de Rosario.

Supported by Argentine Agency ANPCYT

(National Agency of Scientific and Technological Development)

2011 ITX Corp.

Member and co-founder of an independent Argentinian team of

freelance developers that worked in assignments of ITX Corp., NY, USA

Main Tasks: Development of front-end Mobile Websites

2010 - 2011 National University of Rosario, Government Headquarters

Developer in Education Technologies and Administration Secretariat

Main Tasks: Develop of back-end and front-end extensions of online courses platforms.

## Awards and Participation in National and International Competitions

2009 ACM - International Collegiate Programming Contest, Regionals

International Contest: Region of Latin América

2009 Santa Fe State Contest on Competitive Programming

Regional Contest: region of Santa Fe, Argentina

Award: 3rd Position, Bronze Medal

2006 Olimpiada Informática Argentina (Argentinian Olympiad in Informatics)

National Selection Contest for IOI (International Olympiad in Informatics)

Position: 5<sup>th</sup> position

1st substitute of the Argentinian team for the IOI (International Olympiad in Informatics)

that took place in Yucatan, México.

2006 Olimpiada Informática Argentina (Argentinian Olympiad in Informatics)

National Contest

Award: 3rd position, Bronze Medal

2004 Olimpiada Informática Argentina (Argentinian Olympiad in Informatics)

National Contest *Position:* 5<sup>th</sup> position

#### References

• Prof. Jan Ramon, Permanent Researcher in MAGNET team at INRIA-Lille Villeneuve d'Ascq, France

phone.: +33 (0)3 59 35 87 12 email: jan.ramon@inria.fr

website: http://researchers.lille.inria.fr/jramon/

· Prof. Aurélien Bellet, Permanent Researcher in MAGNET team at INRIA-Lille Villeneuve d'Ascq,

France

phone: +33 (0) 3 59 35 87 13 email: aurelien.bellet@inria.fr

website: http://researchers.lille.inria.fr/abellet/

• Prof. Marc Tommasi, Head of the MAGNET team at INRIA-Lille Villeneuve d'Ascq, France

phone: +33 (0)3 59 35 87 23 email: marc.tommasi@inria.fr

website: http://researchers.lille.inria.fr/tommasi/

## Engineering and Programming Skills

Advanced Knowledge in C, C++, STL, Analysis and Algorithm Design, and Data Structures. Advanced Knowledge in Java, PHP and Python. Advanced Knowledge Functional Programming in Haskell and OCaml.

## Languages

**Spanish** Native Speaker.

**English** Advanced writing and reading levels. Fluency to speak and listen.

French Basic writing, reading, oral comprehension and speaking levels.