

## Adrián Soto Suárez

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CONTACT INFORMATION      *Web:* `adriansoto.cl`  
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WORK EXPERIENCE      **PUC Chile,**  
Lecturer, August 2016 – present.  
Teaching assistant, 2013 – 2019.

**PUC Chile, CIWS and IMFD,**  
Research assistant, 2014 – present.

**Simula UC,**  
Software Developer, 2015.

EDUCATION      **PUC Chile,**  
PhD in Computer Science, March 2016 – Estimated May 2020.

- Supervisor: Prof. Juan L. Reutter.
- Thesis title: *Efficient processing of join and federated queries in SPARQL*.
- Research: semantic web, join algorithms and query languages.

**Faculty of Engineer, PUC Chile,**  
Software engineer, March 2011 - October 2018.

TEACHING EXPERIENCE      **PUC Chile, School of Engineering**  
**Undergraduate Courses**

- Lecturer for the “IIC2413 - Bases de Datos” course (Spring 2016, 2017, 2018, Autumn 2019).

**Postgraduate Diploma**

- Lecturer for the “Teoría de Grafos para Big Data” course (Spring 2019).

**Short Courses**

- Teacher for a short course of Data Journalism (2017, 2018): I organised and was a lecturer of a one week course where journalists could learn some topics of data management and programming skills.
- Teacher for a short course of Web Scrapping for Political Science (2019): I gave a lecture about web scrapping in a course of programming skills for political scientists.

**Ohters**

- Organiser and teacher for the course of Java for School Student (2017, 2018).

**Teaching Assistant**

- IIC2233 - Programación Avanzada (4 times).
- IIC1103 - Introducción a la Programación (3 times).
- IIC2413 - Bases de Datos (3 times).
- IIC2154 - Proyecto de Especialidad (2 times).
- IIC3413 - Implementación de Sistemas de Bases de Datos (2 times).
- IIC2143 - Ingeniería de Software.
- IIC2513 - Tecnología y Aplicaciones Web.
- IIC3242 - Complejidad Computacional.
- IIC3432 - Tópicos Avanzados en Bases de Datos.
- IIC3272 - Criptomonedas y Contratos Inteligentes.

#### CAREER HIGHLIGHTS

“Premio excelencia docente, mejor profesor Part-Time del Departamento de Ciencia de la Computación”, PUC Chile 2017.

“Premio al profesor más inspirador del Departamento de Ciencia de la Computación”, PUC Chile 2019.

The paper *Querying APIs with SPARQL* (joint with Juan L. Reutter, Domagoj Vrgoč, Fernando Pieressa and Matthieu Mosser) published in AMW 2019 was invited to be part of the journal *Information Systems* as one of the best three papers in the conference.

The paper *Recursion in SPARQL* (joint with Juan L. Reutter and Domagoj Vrgoč) nominated for the best paper award in the International Semantic Web Conference (the flagship conference for the Semantic Web area) in 2015.

#### JOURNAL PUBLICATIONS

L. Libkin, J. L. Reutter, A. Soto, D. Vrgoč, *TriAL: A navigational algebra for RDF triplestores*, ACM Transactions on Databases Systems 43(1): 5:1-46 (2018).

#### CONFERENCE PUBLICATIONS

Aidan Hogan, Cristian Riveros, Carlos Rojas, A. Soto, *A Worst-Case Optimal Join Algorithm for SPARQL* (ISWC 2019).

Matthieu Mosser, Fernando Pieressa, Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Querying APIs with SPARQL: Language and Worst-Case Optimal Algorithms* (ESWC 2018).

Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Recursion in SPARQL* (ISWC 2015).

#### WORKSHOPS AND DEMOS

Matthieu Mosser, Fernando Pieressa, Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Querying APIs with SPARQL*, (AMW 2019).

Jaime Castro, Adrián Soto, *A Comparison between Cypher and Conjunctive Queries*, (AMW 2017).

Matias Junemann, Juan L. Reutter, Adrián Soto, Domagoj Vrgoč, *Incorporating API Data into SPARQL Query Answers*, (ISWC (Demos) 2016).

#### MANUSCRIPTS UNDER REVIEW

Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Recursion in SPARQL*, submitted to the Semantic Web Journal on August 2019.

Matthieu Mosser, Fernando Pieressa, Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Querying APIs with SPARQL*, submitted to the Information Systems Journal on October 2019.

PROGRAMMING  
SKILLS

Programming: Python, Java, C#, JavaScript, Scala, C, C++, Ruby.

Important Frameworks and Libraries: Django, Flask, SciKit-Learn, Keras, Rails, Express, Koa, NumPy, SimPy, Jupyter, Pandas, Apache Spark, JQuery, Bootstrap.

Query Languages and Database Systems: SQL, SPARQL, Cypher, MongoDB.

REFERENCES

Juan L. Reutter  
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Edificio San Agustin, 4to piso  
Macul 7820436, Santiago, Chile  
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