Adrián Soto Suárez

CONTACT INFORMATION

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WORK EXPERIENCE

Universidad Adolfo Ibáñez, Chile,

Academic, July 2020 – present.

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 – January 2021.

- Supervisor: Prof. Juan L. Reutter.
- Thesis title: *Efficient processing of recursive 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

UAI Chile, Faculty of Engineering and Sciences

Postgraduate Courses

- Lecturer for the "TICS580 - Bootcamp Python & Bases de Datos Relacionales" course (Summer, 2021).
- Lecturer for the "ING559 - Métodos de Aprendizaje de Máquinas para Data Science" course (Spring, 2020).

PUC Chile, School of Engineering

Undergraduate Courses

- Lecturer for the "IIC2413 - Bases de Datos" course (Spring 2016, 2017, 2018, Autumn 2019, 2020).

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 Scraping 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.

"Premio al profesor con mayor comunicación con sus estudiantes", PUC Chile 2020.

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

Matthieu Mosser, Fernando Pieressa, Juan L. Reutter, A. Soto, Domagoj Vrgoč, *Querying APIs with SPARQL*, Accepted at the Information Systems Journal.

J. L. Reutter, A. Soto, D. Vrgoč, *Recursion in SPARQL*, Accepted at The Semantic Web Journal.

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

Diego Arroyuelo, A. Hogan, G. Navarro, J. L. Reutter, J. Rojas-Ledesma, A. Soto, *Worst-case Optimal Graph Joins in Almost No Space* (SIGMOD 2021).

Aidan Hogan, J. L. Reutter, A. Soto, *In-Database Graph Analytics with Recursive SPARQL* (ISWC 2020).

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).

Professional Services

Program committee member ISWC 2021.
Program committee member ESWC 2021.
Subreviewer PODS 2020.
Program committee member ESWC 2020.
Program committee member ECAI 2020.
Program committee member ESWC 2019.
Publicity chair PODS 2018.

Programming Skills

Programming: Python, Java, C#, Julia, 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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Macul 7820436, Santiago, Chile
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