# Sebastián Ferrada

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#### Education

Current Universidad de Chile, Santiago, Chile.

PhD Candidate. Computer Science. Expected graduation: May 2021.

Thesis: Similarity-based Web Queries.

Supervisors: Aidan Hogan and Benjamin Bustos.

2015–2017 Universidad de Chile, Santiago, Chile, 7.0/7.0.

Masters in Computer Science.

Thesis: IMGPEDIA: a Large-scale Knowledge-base to Perform Visuo-semantic Queries over

Wikimedia Commons Images.

2010–2017 **Universidad de Chile**, Santiago, Chile, 7.0/7.0.

Civil Engineer in Computing.

## Publications

Sebastián Ferrada, Benjamin Bustos, and Aidan Hogan. Extending SPARQL with similarity joins. In *The Semantic Web – ISWC 2020*. Springer International Publishing, 2020.

Sebastián Ferrada, Benjamin Bustos, and Nora Reyes. An efficient algorithm for approximated self-similarity joins in metric spaces. *Information Systems*, page 101510, 2020.

Sebastián Ferrada, Benjamin Bustos, and Aidan Hogan. IMGpedia: A linked dataset with content-based analysis of wikimedia images. In *The Semantic Web – ISWC 2017*, pages 84–93. Springer International Publishing, 2017.

Sebastián Ferrada, Benjamin Bustos, and Nora Reyes. A simple, efficient, parallelizable algorithm for approximated nearest neighbors. In *Proc. 12 Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, 2018.

Sebastián Ferrada, Nicolás Bravo, Benjamin Bustos, and Aidan Hogan. Querying wikimedia images using wikidata facts. In *Companion Proceedings of the The Web Conference 2018*, 2018.

Sebastián Ferrada, Benjamin Bustos, and Aidan Hogan. Answering visuo-semantic queries with IMGpedia. In *Demo proc. of the 16th International Semantic Web Conference*, 2017.

Sebastián Ferrada, Benjamin Bustos, and Aidan Hogan. IMGpedia: Enriching the Web of Data with Image Content Analysis. In *Proc. 10 Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, 2016.

## Experience

#### Academic

2020-current **Postdoctoral Researcher**, *Linköping University*, Linköping, Sweden.

Conducting research on the interoperability of graph databases. Mentored by Olaf Hartig.

2017-2020 Teacher, Universidad de Chile, Santiago, Chile.

Data Science Diploma and Undergraduate Program Lecturer in the following courses: Database Systems, Information Retrieval and Introduction to Programming at the Department of Computer Science.

2013-2018 Teaching Assistant, Universidad de Chile, Santiago, Chile.

Various Courses: Databases; Algorithm Analysis; Programming Methodologies; Multimedia Retrieval.

PC Membership

- 2021 **International Semantic Web Conference**, *Programme Committee Member, Research Track*.
- 2021 **Extended Semantic Web Conference**, Poster and Demo Programme Committee Member.
- 2020 **European Conference in Artificial Intelligence**, *Programme Committee Member*.

Industry

2020 REDPIE, Santiago,

Software Engineer.

Full-stack engineer for utopie.cl: Vue, Bootstrap, Django REST Framework, Elastic Search.

2020 Freelance Developer, Santiago.

Full-stack developer: Angular, Material Design, Bootstrap, Django, Flask, Spring-boot

2014 NIC Chile Research Labs, Santiago,

Part-Time Developer.

Andoid App Developer for BeCity.

2013 Rubén Boroschek & Associates, Santiago,

Professional Internship II.

Real-time data mining of status logs for accelerometers.

2013 Rubén Boroschek & Associates, Santiago,

Professional Internship I.

Implementation of mathematic scripts to analyse seismic data.

2012 **Imagicair S.A.**, Santiago,

Part-Time Developer.

J2EE Developer.

### Honours and Awards

- 2018 **Best Graduate**, Distinction awarded by the Chilean Association of Engineers to top recently graduated engineers from Chilean universities.
- 2018 **First Prize**, at the 25th Latin American Contest of Master Thesis, organized by the Latin American Center for Computing Studies.
- 2017 **Best Student Paper**, Resources track, for *IMGpedia: a Linked dataset with Content-based analysis of Wikimedia Images*, at the International Semantic Web Conference.
- 2017 **Best Poster**, for *Answering Visuo-semantic Queries with IMGpedia*, at the International Semantic Web Conference.
- 2017 **CONICYT**, Obtained the national doctorate scholarship from CONICYT (Chilean government) for Ph.D. funding.
- **Outstanding Student**, Awarded by the Faculty of Physical and Mathematical Sciences, Universidad de Chile, for having an excellent academic performance as an undergraduate student.

# Other Qualifications and Skills

- o Fluent in English, oral and written. Native Spanish speaker. Basic German knowledge.
- Extensive teaching experience, both paid and volunteer. Obtained 3.9/4.0 in the latest teaching evaluation from undergraduate students.
- Innate event organiser. I participated twice in the Computer Science Student Union as community coordinator.