Sebastián Ferrada

Education

Current PhD in Computer Science, Universidad de Chile, Santiago.

Pursuing a PhD in Computer Science degree

2015–2017 Masters in Computer Science, Universidad de Chile, Santiago, 7.0.

2010–2017 Civil Engineering in Computer Science, Universidad de Chile, Santiago, 7.0.

2010–2015 Bachelors in Computer Science, Universidad de Chile, Santiago, 5.4.

Masters thesis

Title IMGpedia: a Large-scale Knowledge-base to Perform Visuo-semantic Queries over Wikimedia Commons Images

Supervisors Benjamin Bustos and Aidan Hogan

Description IMGpedia is a linked dataset that contains content description for 15 million Wikimedia

images, provides visual similarity links among them as well as external links to DBpedia and Wikidata. IMGpedia allow people to ask visuo-semantic queries such as "obtain

people similar to paintings on display at the Louvre"

Experience

Academic

Santiago Relational Databases,

2018 Teacher. Lectures and Laboratories for employees of the Central Bank of Chile, Universidad de Chile.

Santiago Databases,

2018 Teacher. Lectures and Laboratories for Diploma course for employees of Santander Bank, Universidad de Chile.

Santiago CC66D - Relational Databases,

2017–2018 Teacher. Lectures and Laboratories for Diploma course, Universidad de Chile.

Santiago CC3201 - Databases,

2014–2018 Teaching assistant. Laboratory preparation and theoretical classes, Universidad de Chile.

Santiago CC3001 - Design and Programming Methodologies,

2014–2017 Teaching assistant. Assignment review and theoretical classes, Universidad de Chile.

Santiago CC5204 - Content-based Image and Video Retrieval,

2016 Teaching assistant. Assignment review, Universidad de Chile.

Santiago CC4102 - Design and Analysis of Algorithms,

2014–2016 Teaching assistant. Assignment review, Universidad de Chile.

Santiago CC3001 - Algorithms and Data Structures,

2014, 2016 Teaching assistant. Theoretical classes, Universidad de Chile.

Work

Santiago Millenium Nucleus Center for Semantic Web Research,

2015–2017 Graduate Research Assistant.

Research tasks in the project involving my PhD thesis, grant N°NC1200004.

Santiago NIC Chile Research Labs,

2014 Part-time Programmer.

I contributed in the implementation of features for the BeCity Android app. The main technologies used in the project were mobile (Eclipse, Android SDK) and Python/Flask/MongoDB for the server side.

Santiago Rubén Boroschek y Asociados,

2013 Part-time Programmer.

I designed and developed a desktop application for real time monitoring accelerometers' internal state for sensors of CChEN (Chilean Commission for Nuclear Energy). The main tools used were Qt/Qt Creator and IntelliJ/Java.

Santiago Imagicair,

2012 Part-time Programmer.

I developed features for a J2EE application for the Heath Insurance System of Carabineros de Chile. Technologies used were IntelliJ, Maven, Spring Webflow, Hibernate, Java Server Faces, Tomcat and Oracle Databases.

Publications

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 *Proc. of the 4th Wiki Workshop*, 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.

Self Promotion

- **CLEI 2018 First Prize**, at the XXV Latin American Contest of Master Thesis, organized by the Latin American Computing Conference.
- **ISWC 2017 Student Best Paper**, *Resources track, for* IMGpedia: a Linked dataset with Content-based analysis of Wikimedia Images.
- ISWC 2017 Best Poster, for Answering Visuo-semantic Queries with IMGpedia.
- DCC 2015 Outstanding Student, for having an excellent performance in the academic year.