

PEDRO OLIVEIRA cpdomina@gmail.com | http://cpdomina.net

Software Engineer specialised in data analysis. Interested in machine learning, natural language processing, recommendation/discovery/search engines, and computational creativity.

WORK EXPERIENCE

Dec 2016–Oct 2018 Senior Software Engineer, *Stardog* (remote)

Designed and developed the machine learning and natural language processing components of Stardog. Also responsible for maintenance and performance improvements on the search, spatial, and document management components, plus frequent support to the sales team.

Jun 2016–Dec 2016 Data Scientist, *wonderif*, Porto, Portugal

Founder of a small (just me!) data analysis company. Helped companies explore and understand their data for content marketing purposes.

Feb 2013–July 2014 Data Engineer, *Disqus*, San Francisco, California

Large-scale data analysis and engineering: built algorithms and data pipeline for a computational advertising system; improved and maintained the content recommendation engine; built an internal search and discovery system.

Dec 2011–Feb 2013 Research Engineer, *Technicolor Research*, Palo Alto, California

R&D on recommendation engines. Mostly focused on using external signals, such as mood and context, to improve movie recommendation and discovery.

Feb 2011–Nov 2011 Founder, *Oriente*, Ourém, Portugal

Founder of Oriente, a social media analytics platform for the Portuguese-speaking market. Dealt with all the components of the business, from research and development to marketing and customer acquisition.

Nov 2010–Feb 2011 Software Engineer, *Clark&Parsia* (remote)

Developed and improved several key parts (indices and runtime statistics) of their database, Stardog.

Nov 2009–Nov 2010 Artificial Intelligence R&D Intern, *Clark&Parsia*, Washington, DC

Added advanced features to existing products using machine learning, natural language processing, social network analysis, and statistical inference techniques. Helped design and build the first prototype of Stardog, a knowledge graph database.

Jul 2006–Oct 2009 Associate Researcher, *Center for Informatics and Systems of the University of Coimbra*, Coimbra, Portugal

Participated in several research projects in the fields of neural networks, multi-agent systems, natural language user interfaces, social network analysis, semantic web, and statistical relational learning.

EDUCATION

2004-2009 BSc+MSc in Informatics Engineering, University of Coimbra, Portugal

PUBLICATIONS

S. Salamatian, A. Zhang, F. Calmon, S. Bhamidipati, N. Fawaz, B. Kveton, Pedro Oliveira, and N. Taft: "Managing your private and public data: Bringing down inference attacks against your privacy", *IEEE Journal of Selected Topics in Signal Processing*, 9(7):1240-1255, 2015

S. Salamatian, A. Zhang, F. Calmon, S. Bhamidipati, N. Fawaz, B. Kveton, Pedro Oliveira, and N. Taft: "How to hide the elephant –or the donkey– in the room: Practical privacy against statistical inference for large data", *IEEE Global Conference on Signal and Information Processing*, Austin, Texas, December 2013

Pedro Oliveira, Paulo Gomes: "Learning and Reasoning about Uncertainty in the Semantic Web", *14th Portuguese Conference on Artificial Intelligence*, Aveiro, Portugal, October 2009

Pedro Oliveira, "Probabilistic Reasoning in the Semantic Web using Markov Logic", MSc Thesis, Department of Informatics Engineering, University of Coimbra, Portugal, July 2009

Pedro Oliveira, Paulo Gomes: "Instance-based Probabilistic Reasoning in the Semantic Web", *18th International World Wide Web Conference*, Madrid, Spain, April 2009

Rui P. Costa, Pedro Oliveira, Guilherme Rodrigues, Bruno Leitão and António Dourado: "Epileptic Seizure Classification Using Neural Networks with 14 Features", *12th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems*, Zagreb, Croatia, September 2008

PATENTS

N. Fawaz, S. Salamatian, A. Zhang, F. Calmon, S. Bhamidipati, Pedro Oliveira, N. Taft, and B. Kveton: "Privacy against inference attacks under mismatched prior", US20160006700, January 2016

Jean Bolot, Pedro Oliveira: "Method and system for targeted crowdsourcing", US20150025963, January 2015

N. Fawaz, S. Salamatian, A. Zhang, F. Calmon, S. Bhamidipati, Pedro Oliveira, N. Taft, and B. Kveton: "Privacy against interference attack for large data", WO2014123893, August 2014

Pedro Oliveira: "Context-based Content Recommendations", WO2014051644, April 2014

Pedro Oliveira, Branislav Kveton: "Mood-based Movie Recommendations", submitted May 2013