



# Tommaso Soru

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## EXPERIENCE

### University of Leipzig, Leipzig, Germany - *PhD Student*

JULY 2012 - PRESENT

- PhD topic titled “Learning Metrics for Link Discovery” under the supervision of Dr. Axel-Cyrille Ngonga Ngomo.
- Development and application of Machine Learning techniques (SVMs, Multilayer Perceptrons) for discovering links in the Linked Data cloud.
- Research and development of a scalable method to discover any type of links using Markov Logic Networks.
- Realization of a knowledge graph embedding model for RDF graphs.
- Development of LinkLion, a portal for Link Discovery.
- Design and development of ROCKER, state-of-the-art algorithm for Key Discovery in RDF datasets.
- Contribution on the development of LIMES 1.0 – Link Discovery framework.

### BuzzTweet, Berlin, Germany - *Lead Developer*

APRIL 2015 - PRESENT

- Design and development of a real-time Sentiment Analysis framework.
- Design and deployment of RESTful APIs.

### GroopLab srl, Berlin, Germany - *Data Scientist, Shareholder*

JUNE 2014 - JUNE 2015

- Startup aiming at the development of a mobile app.
- Development of Machine-Learning methods for the categorization of events by type and musical genre.
- Design and development of a Named Entity Recognition technique to identify artist names in texts.
- Design and deployment of RESTful APIs.

### SS&C srl, Varese, Italy - *Web Developer and Designer*

JANUARY 2007 - JULY 2011

- Website and web application development.

### InfoVadis, Laveno, Italy - *Backend Developer*

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MARCH 2006 - DECEMBER 2006

- Development of applications for data migration.

## EDUCATION

**University of Milan-Bicocca** - *MSc in Computer Science*

NOVEMBER 2008 - SEPTEMBER 2011

Graduated with a major in “Artificial Intelligence and Complex Systems”.

Thesis and Projects: “Learning Domain-Specific Metrics for Link Discovery”, “Semi-automated identification of Italian lemmas using multilingual WordNet”, “Topologies comparison in a Public Goods Game”, “Vision-based Autonomous Driving”.

Main Courses: Artificial Intelligence, Machine Learning, Computer Vision, Soft Computing, Semantics, Information and Knowledge Representation.

**Polytechnic of Milan** - *Bachelor in Computer Engineering*

SEPTEMBER 2003 - SEPTEMBER 2008

Thesis and Projects: “A Geographic Ontology for a Semantic Wiki”, “Knowledge-engineering-based Settlers of Catan”.

Main Courses: Knowledge Engineering, Hypermedia Applications, Theoretical Computer Science, Data Analysis.

## SPECIALTIES

Programming languages: Java, PHP, Javascript / jQuery, Python.

Languages: Italian (native), English (full proficiency), French, German (A2).

Excellent teamwork skills. Strong knowledge of maths. Lateral thinker.

## ORGANIZATIONS & AWARDS

Agile Knowledge Engineering and Semantic Web (AKSW), 2012–today.

Selected to attend the ESWC Summer School, Kalamaki, Greece, 2013.

Best Student Poster Award, ESWC Summer School, 2013.

Machine Learning Schema, World Wide Web Consortium (W3C), 2015–today.

Selected to attend the Lisbon Machine Learning School, Lisbon, Portugal, 2016.

## INTERESTS

Drummer since 1996 with over 180 live shows, 3 Albums, 2 EPs published.

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Singularity, genealogy, soccer, sci-fi enthusiast.

## PUBLICATIONS

Ciro Baron Neto, Diego Esteves, **Tommaso Soru**, Diego Moussallem, Andre Valdestilhas, Edgard Marx, *WASOTA: What Are the States Of The Art?* In proceedings, SEMANTiCS (Posters & Demos), 2016.

Mohamed Ahmed Sherif, Mofeed Hassan, **Tommaso Soru**, Axel-Cyrille Ngonga Ngomo, Jens Lehmann, *The Lion's Den - Feed the LinkLion*. Poster session, Workshop on Ontology Matching, 2016.

Agnieszka Lawrynowicz, Diego Esteves, Pance Panov, **Tommaso Soru**, Saso Dzeroski, Joaquin Vanschoren, *The Algorithm-Implementation-Execution Ontology Design Pattern*. In proceedings, Workshop on Ontology Design Patterns, 2016.

**Tommaso Soru**, Edgard Marx, Axel-Cyrille Ngonga Ngomo, [Enhancing Dataset Quality Using Keys](#). In proceedings, ISWC (Companion Volume), 2015.

Diego Esteves, Diego Moussallem, Ciro Baron Neto, **Tommaso Soru**, Ricardo Usbeck, Markus Ackermann, Jens Lehmann, [MEX vocabulary: a lightweight interchange format for machine learning experiments](#). In proceedings, SEMANTICS, 2015.

Ivano Malavolta, Stefano Ruberto, **Tommaso Soru**, Valerio Terragni, [Hybrid Mobile Apps in the Google Play Store: An Exploratory Investigation](#). In proceedings, MOBILESoft, 2015.

Ivano Malavolta, Stefano Ruberto, **Tommaso Soru**, Valerio Terragni, [End Users' Perception of Hybrid Mobile Apps in the Google Play Store](#). In proceedings, IEEE MS, 2015.

Michael Martin, Konrad Abicht, Claus Stadler, Axel-Cyrille Ngonga Ngomo, **Tommaso Soru**, Sören Auer, [CubeViz: Exploration and Visualization of Statistical Linked Data](#). In proceedings, WWW (Companion Volume), 2015.

**Tommaso Soru**, Edgard Marx, Axel-Cyrille Ngonga Ngomo, [ROCKER: A Refinement Operator for Key Discovery](#). In proceedings, WWW, 2015.

Markus Nentwig, **Tommaso Soru**, Axel-Cyrille Ngonga Ngomo, Erhard Rahm, [LinkLion: A Link Repository for the Web of Data](#). In proceedings, ESWC (Satellite Events), 2014.

**Tommaso Soru**, Axel-Cyrille Ngonga Ngomo, [A comparison of supervised learning classifiers for link discovery](#). In proceedings, SEMANTICS, 2014.

Farshad Badie, **Tommaso Soru**, Jens Lehmann, [A Fuzzy Knowledge Representation Model for Student Performance Assessment](#). In proceedings, ICALT, 2014.

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Edgard Marx, **Tommaso Soru**, Saeedeh Shekarpour, Sören Auer, Axel-Cyrille Ngonga Ngomo, Karin Breitman, [Towards an Efficient RDF Dataset Slicing](#). Article, Int. J. Semantic Computing, 2013.

**Tommaso Soru**, Axel-Cyrille Ngonga Ngomo, [Rapid execution of weighted edit distances](#). In proceedings, OM, 2013.

Daniel Gerber, Sebastian Hellmann, Lorenz Bühmann, **Tommaso Soru**, Ricardo Usbeck, Axel-Cyrille Ngonga Ngomo, [Real-Time RDF Extraction from Unstructured Data Streams](#). In proceedings, International Semantic Web Conference (1), 2013.

**Tommaso Soru**, Axel-Cyrille Ngonga Ngomo, [Active Learning of Domain-Specific Distances for Link Discovery](#). In proceedings, JIST, 2012.