

## Dr. Jérôme Kunegis

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| Education | <b>Dr. rer. nat.</b>   | 2011         |
|           | <a href="#">University of Koblenz–Landau</a>   |              |
|           | Thesis: <i>On the Spectral Evolution of Large Networks</i>   |              |
|           | <b>Dipl.-Inform.</b>   | 2006         |
|           | <a href="#">Technical University of Berlin</a>   |              |
|           | Thesis: <i>Using Integer Linear Programming for Search Results Optimization</i>  |              |
|           | <b>Baccalauréat</b>  | 1999         |
|           | <a href="#">Lycée Français de Berlin</a>   |              |
|           | <b>Abitur</b>  | 1999         |
|           | <a href="#">Lycée Français de Berlin</a>   |              |
|           | <b>Diplôme national du brevet</b>  | 1996         |
|           | <a href="#">Lycée Français de Berlin</a>   |              |
| Positions | <b>Postdoctoral Researcher</b>   | 2011–present |
|           | <a href="#">Institute for Web Science and Technologies</a> , <a href="#">University of Koblenz–Landau</a>  |              |
|           | <b>Visiting Postdoctoral Researcher</b>  | 2013         |
|           | <a href="#">Networks and Operating Systems Group</a> , <a href="#">University of Cambridge</a>   |              |
|           | <b>Research Assistant</b>  | 2010–2011    |
|           | <a href="#">Institute for Web Science and Technologies</a> , <a href="#">University of Koblenz–Landau</a>  |              |
|           | <b>Research Assistant</b>  | 2006–2010    |
|           | <a href="#">DAI Lab</a> , <a href="#">Technical University of Berlin</a>   |              |
|           | <b>Student Research Assistant</b>  | 2002–2006    |
|           | <a href="#">DAI Lab</a> , <a href="#">Technical University of Berlin</a>   |              |
| Teaching  | <ul style="list-style-type: none"><li>• <a href="#">Network Theory and Dynamic Systems</a>, <a href="#">University of Koblenz–Landau</a>, SS 2016.</li><li>• <a href="#">Advanced Topics in Network Science</a>, <a href="#">University of Koblenz–Landau</a>, SS 2016.</li><li>• <a href="#">Introduction to Database Systems</a> (Grundlagen der Datenbanken, Lecturer), <a href="#">University of Koblenz–Landau</a>, WS 2015/2016.</li></ul> |              |

- [Learning Analytics: Aspects of Machine Learning and Empirical Psychology in E-Learning](#), (Learning analytics: Aspekte des Machine Learnings und empirischer Psychologie beim E-Learning, Proseminar), University of Koblenz–Landau, WS 2015/2016.
- [Network Theory and Dynamic Systems](#), University of Koblenz–Landau, SS 2015.
- [Recommender Systems](#) (Seminar), University of Koblenz–Landau, SS 2015.
- [Introduction to Database Systems](#) (Grundlagen der Datenbanken, Lecturer), University of Koblenz–Landau, WS 2014/2015.
- [Distributed Scalable Network Analysis](#) (Research Lab), University of Koblenz–Landau, WS 2014/2015.
- [Advanced Topics in Network Theory](#) (Seminar), University of Koblenz–Landau, SS 2014.
- [Network Theory and Dynamic Systems](#), University of Koblenz–Landau, SS 2014.
- [Introduction to Database Systems](#) (Grundlagen der Datenbanken, Lecturer), University of Koblenz–Landau, WS 2013/2014.
- [Network Theory and Dynamic Systems](#), University of Koblenz–Landau, SS 2013.
- [Social Networks](#) (Soziale Netzwerke, Proseminar), University of Koblenz–Landau, SS 2013.
- [Introduction to Database Systems](#) (Grundlagen der Datenbanken, Lecturer), University of Koblenz–Landau, WS 2012/2013.
- [Social Networks](#) (Soziale Netzwerke, Proseminar), University of Koblenz–Landau, SS 2012.
- [Introduction to Database Systems](#) (Grundlagen der Datenbanken, Assistant), University of Koblenz–Landau, WS 2011/2012.
- [Introduction to Database Systems](#) (Grundlagen der Datenbanken, Assistant), University of Koblenz–Landau, WS 2010/2011.

## Supervised Theses

- Marcel Reif. Automatische Erkennung von exakten und Near-Duplikaten in einer Netzwerkdatenbank, *Bachelor of Science*, University of Koblenz–Landau, 2016.
- Nils Geilen. Entwicklung eines Systems zur Vorhersage von Nutzeraktivität auf den Diskussionsseiten der Wikipedia, *Bachelor of Science*, University of Koblenz–Landau, 2015.
- Jesús Cabello González. Berechnung und Approximation von Kürzeste-Pfad-Statistiken in großen Netzwerken für KONECT, *Bachelor of Science*, University of Cádiz, 2014.
- Julia Preusse. Analysis of the WebUni Online Student Community, *Dipl.-Inform.*, Otto-von-Guericke University Magdeburg, 2010.
- Stephan Spiegel. A Hybrid Approach to Recommender Systems based on Matrix Factorization, *Dipl.-Inform.*, Technical University of Berlin, 2009.
- Christian Banik. Recommending Wiki Articles using Collaborative Filtering, *Dipl.-Inform.*, Technical University of Berlin, 2009.
- Iris Breddin. Untersuchung der Klassifizierbarkeit und Klassifikation von Schweißnahtdaten, *Dipl.-Inform.*, Technical University of Berlin, 2008.

## Conference Organization

- [WeST Off-Campus Meeting \(OCM\)](#), 2016, Chair.
- [INFORMATIK](#), 2013, Publicity Chair.
- [Web Science Conf.](#) (WebSci), 2011, Publicity Chair.
- [Special Session on Uncertainty in Network Mining \(UNM\)](#) at the Int. Conf. on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU), 2010, Technical Chair.

## Program Committees

- [Int. AAAI Conf. on Web and Social Media \(ICWSM\)](#), 2016.
- [Workshop on Social News on the Web \(SNOW\)](#) at the World Wide Web Conf. (WWW), 2016.
- [Workshop on SociAL Semantic Analysis \(SALSA\)](#), 2016.
- [#FAIL! – The Workshop Series](#) at the Internet Research Conf. (IR), 2015.
- [Web Science Track](#), Int. World Wide Web Conf. (WWW), 2015.
- [#FAIL! – The Workshop Series](#) at the Web Science Conf. (WebSci), 2015.
- [Web Science Conf.](#) (WebSci), 2014.
- [Workshop on Social News on the Web \(SNOW\)](#) at the World Wide Web Conf. (WWW), 2014.
- [Workshop on Connecting Online & Offline Life \(COOL\)](#) at the World Wide Web Conf. (WWW), 2014.
- [Web Science Track](#), Int. World Wide Web Conf. (WWW), 2014.
- [Int. Joint Conf. on Artificial Intelligence \(IJCAI\)](#), 2013.
- [Web Science Conf.](#) (WebSci), 2013.
- [Web Science Education Workshop](#) at the Web Science Conf. (WebSci), 2013.
- [Conf. on Semantic Technology and Information Retrieval \(STAIR\)](#), 2013.
- [Int. Workshop on Semantic Personalized Information Management \(SPIM\)](#) at the Int. Conf. on Web Search and Data Mining (WSDM), 2013.
- [European Conf. on Information Retrieval \(ECIR\)](#), 2013.
- [Workshop on Metrics, Analysis and Tools for Online Community Management \(MAMA\)](#), at INFORMATIK, 2013
- [Web Science Conf.](#) (WebSci), 2012.
- [European Conf. on Information Retrieval \(ECIR\)](#), poster track, 2012.
- [Conf. on Natural Language Processing \(KONVENS\)](#), 2012.
- [Workshop on Personalized Information Management: Linking Social and Semantic Web \(SPIM\)](#) at the Int. Conf. on Web Engineering (ICWE), 2012.
- [Conf. on Information and Knowledge Management \(CIKM\)](#), 2011.
- [Web Science Conf.](#) (WebSci), 2011.
- [Int. Conf. on Knowledge Discovery and Data Mining \(KDD\)](#), research track, 2011.
- [Challenge on Context-aware Movie Recommendation \(CAMRa\)](#) at the Conf. on Recommender Systems (RecSys), 2010.
- [Special Session on Uncertainty in Network Mining \(UNM\)](#) at the Int. Conf. on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU), 2010.

## Ten Selected Publications

- [1] [Continuous-time quantum walks on directed bipartite graphs](#). Beat Tödtli, Monika Laner, Jouri Semenov, Beatrice Paoli, Marcel Blattner, and Jérôme Kunegis. *Phys. Rev. A*, 2016. Accepted for publication.
- [2] [On the ubiquity of web tracking: Insights from a billion-page web crawl](#), Sebastian Schelter and Jérôme Kunegis, 2016. In review.
- [3] [Linguistic neighbourhoods: Explaining cultural borders on Wikipedia through multilingual co-editing activity](#). Anna Samoilenko, Fariba Karimi, Daniel Edler, Jérôme Kunegis, and Markus Strohmaier. *Eur. Phys. J. Data Science*, 5(9), 2016.
- [4] [Voting behaviour and power in online democracy: A study of LiquidFeedback in Germany's Pirate Party](#). Christoph Carl Kling, Jérôme Kunegis, Heinrich Hartmann, Markus Strohmaier, and Steffen Staab. In *Proc. Int. Conf. on Weblogs and Social Media*, pages 208–217, 2015.
- [5] [Social networking by proxy: A case study of Catster, Dogster and Hamsterster](#). Daniel Dünker and Jérôme Kunegis. 2015.
- [6] [Social networking by proxy: Analysis of Dogster, Catster and Hamsterster](#). Daniel Dünker and Jérôme Kunegis. In *Proc. Int. Conf. on World Wide Web Companion*, pages 361–362, 2015.
- [7] [Exploiting the structure of bipartite graphs for algebraic and spectral graph theory applications](#). Jérôme Kunegis. *Internet Math.*, 11(3):201–321, 2015.
- [8] [Detecting non-Gaussian geographical topics in tagged photo collections](#). Christoph Carl Kling, Jérôme Kunegis, Sergej Sizov, and Steffen Staab. In *Proc. Int. Conf. on Web Search and Data Mining*, pages 603–612, 2014.
- [9] [What is the added value of negative links in online social networks?](#) Jérôme Kunegis, Julia Preusse, and Felix Schwagereit. In *Proc. Int. World Wide Web Conf.*, pages 727–736, 2013.
- [10] [Structural dynamics of knowledge networks](#). Julia Preusse, Jérôme Kunegis, Matthias Thimm, Thomas Gottron, and Steffen Staab. In *Proc. Int. Conf. on Weblogs and Social Media*, pages 506–515, 2013.
- [11] [Spectral evolution in dynamic networks](#). Jérôme Kunegis, Damien Fay, and Christian Bauckhage. *Knowledge and Information Systems*, 37(1):1–36, 2013.
- [12] [Predicting directed links using nondiagonal matrix decomposition](#). Jérôme Kunegis and Jörg Fliege. In *Proc. Int. Conf. on Data Mining*, pages 948–953, 2012.
- [13] [Bad news travels fast: A content-based analysis of interestingness on Twitter](#). Nasir Naveed, Thomas Gottron, Jérôme Kunegis, and Arifah Che Alhadi. In *Proc. Web Science Conf.*, 2011.
- [14] [Spectral analysis of signed graphs for clustering, prediction and visualization](#). Jérôme Kunegis, Stephan Schmidt, Andreas Lommatzsch, and Jürgen Lerner. In *Proc. SIAM Int. Conf. on Data Mining*, pages 559–570, 2010.
- [15] [Learning spectral graph transformations for link prediction](#). Jérôme Kunegis and Andreas Lommatzsch. In *Proc. Int. Conf. on Machine Learning*, pages 561–568, 2009.
- [16] [The Slashdot Zoo: Mining a social network with negative edges](#). Jérôme Kunegis, Andreas Lommatzsch, and Christian Bauckhage. In *Proc. Int. World Wide Web Conf.*, pages 741–750, 2009.

## Keynotes and Invited Talks

- Algebraic Graph-theoretic Measures of Conflict, [Journée Graphes et Systèmes Sociaux](#) (Seminar on Graphs and Social Systems), 2016.
- Measuring Conflict in Signed Social Networks, Application of Network Theory on Computational Social Science (Workshop), 2015.
- Large Network Collections: The Power of Many Datasets, [Int. Workshop on Social Network Analysis](#) (ARS), 2015.
- Network Analysis Tools for Online Communities: The Koblenz Network Collection. Keynote, [Workshop on Metrics, Analysis and Tools for Online Community Management](#) (MAMA), 2013.

## Mentions in Media

- [Die Abstimmungssoftware LiquidFeedback in der Piratenpartei: wegweisend für Demokratie 2.0?](#), [www.piratenpartei.de](http://www.piratenpartei.de), May 2015.
- [Come ha funzionato davvero la democrazia liquida dei Pirati tedeschi](#), Wired Italia, April 2015.

## Awards and Nominations

- First Prize, Int. Conf. on Web and Social Media (ICWSM) Science Slam, 2016.
- Best Poster Award, Int. School and Conf. on Network Science (NetSciX), 2016.
- Best Paper Honorable Mention, Int. Conf. on Web and Social Media (ICWSM), 2015.
- Ted Nelson Newcomer Award Nominee, Conf. on Hypertext and Social Media (HT), 2012.
- Student Travel Award, Int. Conf. on Information and Knowledge Management (CIKM), 2010.
- Student Travel Fellowship Award, SIAM Conf. on Data Mining (SDM), 2010.
- Best Paper Nominee, Industrial Conf. on Data Mining (IndCDM), 2007.
- Premier Prix (First Prize), Rallye mathématique d'Alsace, Terminale (Alsace Mathematical Rally), 1999.

## Main Software Authorship

- [Stu](#), build automation (C++11)
- SynGraphy, graph generator (Matlab)
- [KONECT Toolbox](#), network analysis toolbox (Matlab, C99)
- [Polcovar](#), software for counting patterns in random graphs (Matlab)
- Universal Recommender, recommendation library (Java)
- BabyChess, chess engine (C++98)
- *More: see [github.com/kunegis](https://github.com/kunegis)*

## Miscellaneous

- Birthday: March 27
- Languages: French (first language), German (first language), English (advanced)
- Programming languages and technologies I use extensively: Bourne shell, C, C++, Java, Latex, Make, Matlab, sed