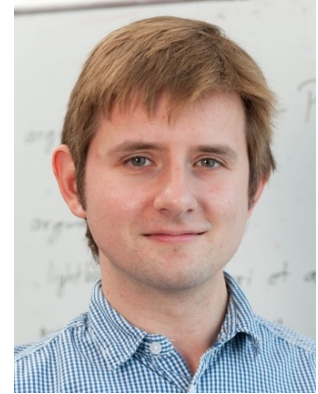


# CURRICULUM VITAE OF PROF. KARSTEN BORGWARDT

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## EMPLOYMENT & EDUCATION HISTORY

2017 – now **Full Professor of Data Mining**

 Department Biosystems  
ETH Zürich


2014 – 2017 **Associate Professor of Data Mining**

 Department Biosystems  
ETH Zürich


2011 – 2014 **Associate Professor (W2) of Data Mining in the Life Sciences**

 Department of Computer Science  
Eberhard Karls Universität Tübingen

2008 – 2014 **W2 Research Group Leader (Assistant Professor, tenured since 2010)**

 Machine Learning and Computational Biology Research Group  
Max Planck Institutes Tübingen, Directors D. Weigel and B. Schölkopf


2007 – 2008 **Postdoctoral Research Associate**

 Machine Learning Group, Chairholder: Prof. Zoubin Ghahramani  
University of Cambridge

2005 – 2007 **PhD Student & Research Assistant**

 Data Mining & Database Unit, Chairholder: Prof. Hans-Peter Kriegel  
Ludwig-Maximilians-Universität München


2004 **Academic Visitor (for writing master thesis in Computer Science)**

 Machine Learning Group, Prof. Alex Smola, Prof. SVN Vishwanathan  
NICTA Canberra, Australia

2002 – 2003 **Student of Biology (M.Sc. in 2003)**

 Department of Zoology  
University of Oxford




1999 – 2004 **Student of Computer Science (Diplom in 2004)**

 Department of Mathematics, Computer Science & Statistics  
Ludwig-Maximilians-Universität München  
(on leave for studying in Oxford during academic year 2002/03)

## AWARDS & HONORS

- 2016 One of the "**Top 40 under 40 in Science and Society**" in Germany according to Business Journal *Capital*
- 2015 **Starting Grant** Awardee (ERC backup scheme of the Swiss National Science Foundation, 1.42 million CHF, 5 years, started May 1st, 2015)
- 2015 **Elected Chairman of the Steering Committee** of the Annual Meeting for *Machine Learning in Systems Biology* (MLSB), 2015-2017
- 2015 One of the "**Top 40 under 40 in State & Society**" from Germany (including 12 scientists) according to Business Journal *Capital*
- 2014 One of the "**Top 40 under 40 in Science**" from Germany according to Business Journal *Capital*
- 2013 **Alfried-Krupp-Förderpreis für junge Hochschullehrer** (Annual Krupp award of 1 million EUR for one professor in Germany of age less than 38)
- 2012 **Scientific Coordinator of a Marie Curie Initial Training Network** on *Machine Learning in Personalized Medicine* (2013-2016, 8 countries, 12 labs, 14 PhD students)
- 2009 **NIPS Outstanding Student Paper Award** as Supervisor and Co-Author of PhD student & awardee Nino Shervashidze (*out of 1105 submissions*)
- 2007 **Heinz-Schwärtzel-Dissertation-Award** for Foundations of Computer Science (*Best PhD thesis award in Computer Science at TUM, LMU and UniBw München*)
- 2007 Scholar of the **German Academic Merit Foundation (Studienstiftung des deutschen Volkes)** as PhD student
- 2002 Scholar of the **German Academic Merit Foundation (Studienstiftung des deutschen Volkes)** as undergraduate student
- 1999 Scholar of the **Bavarian Foundation for the Gifted** (BayBFG) (*250 students out of 30,000 students per year in Bavaria*)
- 1999 Scholar of the **Stiftung Maximilianeum** in Munich (*5-10 students out of 30,000 students per year in Bavaria*)

## ACADEMIC DEGREES

- 2007  **Ph.D. in Computer Science (obtained on July 5, 2007), *summa cum laude***  
Data Mining & Database Unit, Chairholder: Prof. Hans-Peter Kriegel  
Ludwig-Maximilians-Universität München
- 2004  **Diplom (M.Sc. equivalent) in Computer Science**  
Department of Mathematics, Computer Science & Statistics  
Ludwig-Maximilians-Universität München
- 2003  **M.Sc. in Biology**  
Department of Zoology  
University of Oxford

## THIRD-PARTY FUNDING AND INDUSTRIAL EXPERIENCE

- 2015 Partner node in **Horizon2020 research network** on MRI classification (own budget: 520.000 CHF, 4 years)
- 2014 **Starting Grant** for *Significant Pattern Mining* (ERC backup scheme of the Swiss National Science Foundation, 1.42 million CHF, 5 years)
- 2013 **Alfried Krupp Award** for Young Professors (1 million EUR, 5 years)
- 2013 Scientific Coordinator of a **Marie Curie Initial Training Network** (in total: 14 PhD students at 12 labs in 8 countries, network budget: 3.75 million EUR, own budget: 0.75 million EUR, 4 years)
- 2012 Co-founder & scientific mentor of the Tübingen-based **bioinformatics service company Computomics** (computomics.com); supported by the High-Tech Venture Capital Funds of the German Federal Government since 2015.
- 2010 **Research grant from DFG** for *Kernels on Large, Labeled Graphs* (German Research Council, 3 years approx. 240.000 EUR)

## MAJOR PROFESSIONAL SERVICES

### Scientific Coordinator

- Elected Chairman of the Steering Committee of the Annual Meeting for *Machine Learning in Systems Biology* (MLSB, 2015-2017)
- Scientific Coordinator of the Marie Curie Initial Training Network on *Machine Learning for Personalized Medicine* (2013-2016, 12 labs with 14 PhD students)

### Board Member or Expert Reviewer

- Scientific Advisory Board Member of Tübingen's Quantitative Biology Center QBIC (with Sarah Teichman, Gene Myers and Christan von Mering, 2015-)
- Steering Board Member of the Swiss Data Science Center (2015-)
- Steering Board Member of the ETH Nexus Personalized Medicine Platform (2014-)
- Steering Board Member of the Genomics Facility Basel (2014-)
- Expert Reviewer for the Swiss National Ethics Committee on "Machine Learning for the Analysis of Biobanks" (2014)

### Editor

- Journal of Machine Learning Research (Action Editor, since 2013)
- Springer's Machine Learning Journal (Action Editor since 2015, Editorial Board Member since 2011)
- IEEE Transactions on Pattern Analysis and Machine Intelligence (Associate Editor for maximum period of 4 years: 2012-2016)

### Programme Chair

- Machine Learning for Personalized Medicine Conference 2016 (Barcelona, May 19/20)
- Machine Learning for Personalized Medicine Summer School 2013 (65 participants)
- Machine Learning for Systems Biology 2012 (Workshop with 150 participants)
- Machine Learning Summer School 2011, Purdue (co-organizer, 200 participants)
- NIPS Workshop: Personalized Medicine Workshop 2011 (Workshop with 50 participants)
- Mining and Learning on Graphs 2009 (Workshop with 100 participants)
- NIPS Workshop: Transfer Learning on Structured Data 2009 (50 participants)
- NIPS Workshop: Structured Input Structured Output 2008 (Workshop with 50 participants)

### Area Chair

- ICML 2013, NIPS 2013, 2014, AISTATS 2015, KDD 2016, ECML 2016, ICML 2017, NIPS 2017

**Plus reviewer for numerous leading journals, conferences, funding agencies and faculty recruiting committees in Machine Learning, Data Mining, Applied Mathematics, Bioinformatics and Genetics**