Max Zimmermann

Curriculum Vitae

Education

2011–Present	**PhD student**, *"Knowledge Management and Discovery"*, University of Magdeburg, Germany.
2009–2011	**Master study**, *"Data and Knowledge Engineering"; Focus areas: Stochastic models (Hidden Markov Models, Bayesian Networks), Data analysis (time series, unsupervised- and semi-supervised learning), Thesis: Identifying Homogeneous Behavior of Moving Objects by Partitioning*, University of Magdeburg, Germany.
2004–2008	**Diploma study**, *"Business Informatics"; Focus areas: Databases, Object-oriented programming, Data mining and information retrieval, Internet-based technologies, Software Management, Thesis: Detecting small patters in very noisy data*, Ostfalia - University of applied sciences, Wolfsburg, Germany.
2000–2003	**Abitur (Highschool Diploma)**, *Intensive courses: Mathematics and Electrical engineering*, Fachgymnasium Technik, Braunschweig, Germany.

Work and Teaching Experience

4/2011–Present	**Researcher**, *"Knowledge Management and Discovery" group*, University of Magdeburg, Germany.

Dissertation project: Discovering and Monitoring attitudes of product properties over time. Developing and evaluating opinion stream mining algorithms for monitoring product aspects and their sentiment over time. Applied on streams of product reviews (Amazon) and microblogging data such as Twitter.

Research Projects:
- German Research Foundation project SP 572/11-1 "IMPRINT: Incremental Mining for Perennial Objects"

Teaching:
- Summer term 2014: Coordinating "Seminar Bachelor"
- Summer term 2013: Exercise class "Data Mining"
- Summer term 2012: Exercise class "Data Mining"
- Winter term 2012: Lecturer "Advanced Topics in Knowledge Management and Discovery (Sentiment/Opinion Mining)"
- Summer term 2011: Exercise class "Data Mining"

10/2009–04/2011	**Research assistant**, *"Knowledge Management and Discovery" group*, University of Magdeburg, Germany.
	Research on spatio-temporal data mining. Implementation of dynamic data mining tools and predictive tools for human resource planning.
02/2009–09/2009	**Research associate**, *"Knowledge Management and Discovery" group*, University of Magdeburg, Germany.
	Research associate in the Next Generation Media BMWi project Ko-RFID in particular at the sub-project "Data Aggregation and Predictive Analysis".
03/2008–09/2008	**Student internship**, *BT Innovate, Intelligent Systems Research Centre*, Ipswich, United Kingdom.
	Analysis and optimization of a cluster-anaylze tool through a self-developed multidimensional index structure and problem-specific assignment algorithms.
09/2007–02/2008	**Student assistant**, *Data security office, Prof. Dr. Michael Wettern*, Technical University of Braunschweig, Germany.
	Supporting lectures towards data security.
11/2006–01/2007	**Student assistant**, *Department of communications engineering*, Technical University of Braunschweig, Germany.
	Implementation of a software that emulates the system load in mobile cells of a mobile network.
06/2006–10/2006	**Student employee**, *ckc Integrated Solutions AG*, Braunschweig, IT- and business-consulting-supplier in northern Germany.
	Conception and creation of an import-export-engine.

Publications

Max Zimmermann, Eirini Ntoutsi, and Myra Spiliopoulou. A Semi-supervised Self-Adaptive Classifier over Opinionated Streams, *Sentire'14 workshop ICDMW '14, to appear 12/2014*

Max Zimmermann, Eirini Ntoutsi, and Myra Spiliopoulou. Extracting opinionated (sub)features from a stream of product reviews using accumulated novelty and internal hierarchy re-organization. *Journal - Information Sciences., 2014. under revision 10/2014*

Max Zimmermann, Eirini Ntoutsi, and Myra Spiliopoulou. Discovering and monitoring product features and the opinions on them with opinstream. *Journal - Neurocomput., 2014. accepted 4/2014, to appear 2014.*

Max Zimmermann, Eirini Ntoutsi, and Myra Spiliopoulou. Adaptive semi supervised opinion classifier with forgetting mechanism. *In Proc. of the 29th Annual ACM Symposium on Applied Computing, SAC14. ACM, 2014.*

Max Zimmermann, Eirini Ntoutsi, and Myra Spiliopoulou. Extracting opinionated (sub)features from a stream of product reviews. *In Proc. of the 16th Int. Conf. on Discovery Science (DS2013), Singapore, Oct. 2013. Springer.*

Max Zimmermann, Irene Ntoutsi, Zaigham Faraz Siddiqui, Myra Spiliopoulou, and Hans-Peter Kriegel. Discovering global and local bursts in a stream of news. *In Proc. of the Symposium on Applied Computing, Italy, March 2012.*

Max Zimmermann, Thomas Kirste, and Myra Spiliopoulou. Finding stops in error-prone trajectories of moving objects with time-based clustering. *In Intelligent Interactive Assistance and Mobile Multimedia Computing, volume 53 of Communications in Computer and Information Science, Springer, 2009.*

Reviewerships

CIKM'14, external reviewer

BASNA'14, programme committee

KDD'12, external reviewer

Invited Talks

May 2014	**"Advances in Opinion Stream Mining"**, Department of Informatics of Aristotle University, Thessaloniki, Greece
September 2012	**"Burst detection in streams of news data"**, Department of Informatics of Aristotle University, Thessaloniki, Greece

Computer skills

OS	Linux (Fedora), Windows(98,2000,XP,Vista,7)
Languages	JAVA, C/C++, R, PYTHON, JavaScript, CSS, Bash, HTML, LATEX, UML
Applications	Data Mining (Weka, RapidMiner, MOA), Text Mining (OpenNLP, Lucene), Environment (Eclipse, Visual Studio, RStudio Emacs)
Databases	Oracle, MySQL, JDBC, SQuirreL, Toad

Languages

German	**mother tongue**	
English	**Fluent**	*Highly proficient in spoken and written English*
French	**Basic**	*Basic words and phrases only*

References

Prof. Myra Spiliopoulou, myra@iti.cs.uni-magdeburg.de: full professor at University of Magdeburg, Supervisor PhD Thesis

Dr. Eirini Ntoutsi, ntoutsi@dbs.ifi.lmu.de, postdoctoral researcher at Ludwig Maximilian University of Munich