

# Tommy Hielscher

Date of birth: 25.04.1987  
Place of birth: Magdeburg, Germany  
Nationality: German  
Marital status: Single

## Office Contact Information

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Curriculum Vitae

## Research Positions

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Since 04/2019	University of Magdeburg, Germany Postdoctoral Research Assistant
12/2013 - 03/2019	University of Magdeburg, Germany Research Assistant
2013	University of Magdeburg, Germany Student Assistant

## Education

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2019	University of Magdeburg, Germany Ph.D. in Computer Science, Dr.-Ing. Grade: magna cum laude (excellent) Doctoral Theses: Exploiting Background Knowledge on Evolving Objects to Identify Relevant Dimensions for Classification
2013	University of Magdeburg, Germany Master of Science (M.Sc.) in Business Information Systems Grade: 1.5 Master Thesis: Adaptives Lernen eines domänenspezifischen Lexikons für die Berechnung von Wortpolaritäten Thesis Grade: 1.7
2011	University of Magdeburg, Germany Bachelor of Science (B.Sc.) in Business Information Systems Grade: 1.6 Bachelor Thesis: Development of software agents for self-regulation in a cloud computing environment Thesis Grade: 1.1

## Awards & Honours

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2017	Stockholm, Sweden and Magdeburg, Germany ERASMUS Lecturer Exchange Programme Participant
2014	Mount Sinai, New York, USA IEEE CBMS 2014 Best Student Paper Award
2008	University of Magdeburg, Germany Friedrich Naumann Foundation for Freedom Scholarship Nominee

## Publications

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Tommy Hielscher. Exploiting Background Knowledge on Evolving Objects to Identify Relevant Dimensions for Classification. Otto-von-Guericke-Universität Magdeburg, 2019

Tommy Hielscher, Uli Niemann, Bernhard Preim, Henry Völzke, Till Ittermann, and Myra Spiliopoulou. A Framework for Expert-Driven Subpopulation Discovery and Evaluation Using Subspace Clustering for Epidemiological Data. Expert Systems with Applications, 2018

Tommy Hielscher, Henry Völzke, Panagiotis Papapetrou, and Myra Spiliopoulou. Discovering, selecting and exploiting feature sequence records of study participants for the classification of epidemiological data on hepatic steatosis. Proc. of the 33rd Annual ACM Symposium on Applied Computing (SAC '18). ACM, New York, NY, USA, 2018

Shiva Alemzadeh, Tommy Hielscher, Uli Niemann, Lena Cibulski, Till Ittermann, Henry Völzke, Myra Spiliopoulou, and Bernhard Preim. Subpopulation Discovery and Validation in Epidemiological Data. EuroVis Workshop on Visual Analytics, 2017.

Tommy Hielscher, Myra Spiliopoulou, Henry Völzke, and Jens-Peter Kühn. Identifying relevant features for a multi-factorial disorder with constraint-based subspace clustering. Proc. of the 29th IEEE Int. Symposium on Computer-Based Medical Systems (CBMS16), IEEE, Dublin, Ireland and Belfast, Northern Ireland, June 2016.

Uli Niemann, Tommy Hielscher, Myra Spiliopoulou, Henry Völzke, and Jens-Peter Kühn. Can we classify the participants of a longitudinal epidemiological study from their previous evolution?. Proc. of the 28th IEEE Int. Symposium on Computer-Based Medical Systems (CBMS15), IEEE, São Carlos and Ribeirão Preto, Brazil, June 2015.

Tommy Hielscher, Myra Spiliopoulou, Henry Völzke, and Jens-Peter Kühn. Mining longitudinal epidemiological data to understand a reversible disorder. Proc. of the 13th Int. Symposium on Intelligent Data Analysis (IDA'14), Springer, Leuven, Belgium, 2014.

Tommy Hielscher, Myra Spiliopoulou, Henry Völzke, and Jens-Peter Kühn. Using Participant Similarity for the Classification of Epidemiological Data on Hepatic Steatosis. Proc. of the 27th IEEE Int. Symposium on Computer-Based Medical Systems (CBMS14), IEEE, Mount Sinai, NY, 2014.

Matthias Mocosch, Torsten Urban, Hans-Knud Arndt, Tommy Hielscher, and Gerrit Winsczyk. Sustainability of the iPhone.. EnviroInfo, 2013.

## **Talks & Presentations**

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Paper Presentation at the 33rd Annual ACM Symposium on Applied Computing: Discovering, selecting and exploiting feature sequence records of study participants for the classification of epidemiological data on hepatic steatosis, Pau, France, 2018

Research Presentation at the Faculty of Social Sciences, Department of Computer and Systems Sciences, as part of the ERASMUS Lecturer Exchange Programme: Exploiting background knowledge of evolving objects to identify relevant dimensions for classification, Stockholm, Sweden, 2017

Research Presentation at Tinnitus Think Tank Meeting on Ecological Momentary Assessment: Data Science for Streams of Patient Data – Challenges and Opportunities, Herrsching, Germany, 2016

Research Presentation at the European Conference on Data Analysis: Exploiting longitudinal epidemiological data in similarity-based classification, Bremen, Germany, 2014

Paper Presentation at the 13th International Symposium on Intelligent Data Analysis: Mining longitudinal epidemiological data to understand a reversible disorder, Leuven, Belgium, 2014

Paper Presentation at the 27th IEEE International Symposium on Computer-Based Medical Systems: Using Participant Similarity for the Classification of Epidemiological Data on Hepatic Steatosis, Mount Sinai, New York, USA, 2014

## **Participation in Training Programmes**

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2017	Stockholm, Sweden and Magdeburg, Germany ERASMUS Lecturer Exchange Programme Participant
2017	Magdeburg, Germany In Führung gehen - Führungskompetenz in Wissenschaft und Wirtschaft, University of Magdeburg

## **Teaching Experience - Lectures**

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Data Mining for Business Applications (BA & MA – level lecture, ST15), University of Magdeburg

## **Teaching Experience – Exercises & Seminars**

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Data Mining for Business Applications (BA & MA – level exercise classes, ST14, ST15, ST16, ST17, ST18), University of Magdeburg

Wissensmanagement: Methoden und Werkzeuge (BA – level exercise classes, WT14/15, WT15/16, WT16/17, WT17/18, WT18/19), University of Magdeburg

Knowledge Management & Discovery (BA – level Seminar, WT14/15, WT15/16, ST16, WT16/17, WT18/19), University of Magdeburg

Advanced Topics in Knowledge Management & Discovery (MA – level Seminar, WT14/15, ST15, WT15/16, ST16, WT16/17, WT18/19), University of Magdeburg