

# Media Computer Science

## Master and Bachelor Thesis @ MICS

<http://mics.fim.uni-passau.de/teaching/theses/>



Below you find a list of available topics and a short explanation for the different categories. Follow the link for further details. Own suggestions of topics (as long as they fit in the categories below) are more than welcome. Depending on the topic and on the student's interest, a thesis may emphasize one of the following aspects:

- Implementation and evaluation of a particular application scenario (emphasizes software implementation)
- Analysis of particular data sets (emphasizes the application of data mining/text mining methods)
- Implementation and evaluation of algorithms (emphasizes algorithmic development)
- User interface design and evaluation (emphasizes HCI aspects)

Note that we collaborate with young internet start-ups like for example Mendeley in London, UK or MeisterLabs in Munich. Hence, we can offer opportunities for internships on certain master thesis topics.

If you are interested write an e-mail to Michael Granitzer (or engage me after a lecture)

## Categories and Topics:

### Web Development and Semantic Web

Master and Bachelor thesis in this category target innovative approaches (algorithms, server components or user interfaces) that improve the usage of Open Data in the Web, in particular the Semantic Web. Topics include, but are not limited to:

- [Games with a Purpose for Entity Disambiguation](#)
- [Creating User Awareness in Online Social Media \(no longer available\)](#)
- [Efficient creation of disambiguation indices from RDF \(no longer available\)](#)
- [Creating navigation hierarchies from RDF Data](#)
- [A User-driven approach for the Triplification of Fact Tables](#)

### Information Retrieval

Master and Bachelor thesis in this category target the development of information retrieval algorithms and the application of information retrieval techniques on different data sets. Topics include, but are not limited to:

- [Implementation of a Regular Expression based Search Engine](#)
- Development of a scalable information retrieval engine for plagiarism analysis
- Development of a web search engine

### Data Mining, Social Web

Master and Bachelor thesis in this category target the development and application of data mining algorithms for mining interesting patterns from large-scale text corpora or social network data. Topics include, but are not limited to:

- [Automatic classification of Scientific Papers](#)
- [Fact Extraction with Regular Expressions](#)
- [Implementation of Machine Learning Algorithms](#)
- [Evolution of News in the Web](#)
- [Analysing user behaviour in the Wiki Game using Genetic Algorithms](#)
- [Analysing Log Data for Scientific Online Library](#) (Potential research stay at Mendeley in London for 1-2 Months possible)

### User-Centered Aspects

Master and Bachelor thesis in this category target the design and evaluation of web-based rich client interfaces or mobile applications. Students in the Master of Media and Communication are particularly welcome along this user centered aspects. The topics include, but are not limited to:

- Development of Browser Plugins for Collaborative Annotation of Web Pages
- User Interfaces for Injecting Recommendation Results into Social Media Channel