

Ke Tao

Curriculum Vitae

Web Information Systems
Delft University of Technology
Mekelweg 4, 2628 CD Delft
the Netherlands

☎ +31 15 27 87822

✉ k.tao@tudelft.nl

@taubau



Personal Information

Day of birth 19th October 1988
Place of birth Beijing, China
Citizenship Chinese
Marital Status single

Education

2010 – now **PhD student in Computer Science**, *Delft University of Technology*,
Topic: Information extraction and search in microblogging streams.
2007 – 2009 **Master of Science in Computer Science**, *National University of Defense Technology*,
Thesis: *Research on Frequent Itemsets Mining Technology over Data Streams*.
2003 – 2007 **Bachelor of Science in Computer Science**, *National University of Defense Technology*,
Thesis: *The design and implementation of TaToS : A Visualized Simulator of Peer-to-Peer System*.

Work Experiences

October 2010 – now **PhD student, Researcher**, *Web Information Systems Group at Delft University of Technology*, Delft, the Netherlands,
I am studying as a PhD student (mentors: dr. ir. Geert-Jan Houben, Dr. Claudia Hauff, and Dr. Fabian Abel). Main research interests: search on social web, user modeling, and personalisation. <http://www.wis.ewi.tudelft.nl/>.

Projects

September 2011 – now **Twinder**, *Research line*, <http://wis.ewi.tudelft.nl/twinder/>.
Research line on search in the Social Web, especially Twitter. My role in the project: ideas, design, implementation.
June 2011 – now **Twitcident**, *Research line*, <http://wis.ewi.tudelft.nl/twitcident/>.
Research line on mining social media in times of crises. My role in the project: ideas, case analysis, algorithms design, implementation.
January 2011 – now **PersWeb**, *Research line*, <http://persweb.org>.
Research line on personalisation in the Social Web. My role in the project: researcher.
January 2011 – now **U-Sem**, *Coding project*, <http://u-sem.org>.
User Modeling infrastructure for the Social Web with services such as TUMS (Twitter-based User Modeling Service) that analyses user behaviour on Twitter streams. My role in the project: design, implementation of application and programming interface.
October 2006 – March 2007 **CMM Tools**, *Coding project*.
CMM (Capability Maturity Model for Software) Tools for School of Computer, National University of Defense Technology. My role in the project: design, implementation of web-based automatical documenting system.

Technology Capabilities

Java, C, C++, Python
Distributed computing, Hadoop
Statistical analysis, R
Numerical analysis, Octave
Scripting languages, HTML/XHTML, CSS, Shell Scripting
Querying languages, SQL, SPARQL

Research Interests

Search and Ranking
Data Mining
Data Visualisation
User Modeling and Personalisation
Semantic Web

Teaching Experiences

- October 2012 – January 2013 **Guest Lecturer**, *Web and Semantic Web Engineering*, Delft University of Technology.
Giving lectures, designing, grading assignments of generating user profiles, and constructing and analysing features for solving a given problem
- September 2008 – January 2009 **Teaching Assistant**, *Artificial Intelligence*, National University of Defense Technology.
Design and grading of homework and project assignments; organizing and translating materials in English for lecturer
- March 2008 – June 2008 **Teaching Assistant**, *Project Workshop of Object-Oriented Programming*, National University of Defense Technology.
Instruction on C++ programming, building Windows application, evaluation and grading of the final works.

Publications

- WWW '13 Ke Tao, Fabian Abel, Claudia Hauff, Geert-Jan Houben, Ujwal Gadiraju. Groundhog Day: Near-Duplicate Detection on Twitter. Accepted at: *International Conference on World Wide Web (WWW)*, Rio de Janeiro, Brazil, May 2013
- IJCAI '13 Twitter-based User Modeling for News Recommendations. Invited by: *International Joint Conference on Artificial Intelligence (IJCAI)*, Beijing, China, August 2013. Co-authors: Fabian Abel, Qi Gao, Geert-Jan Houben.
- JCDL '13 Elaheh Momeni, Ke Tao, Bernhard Haslhofer, Geert-Jan Houben. Identification of Useful User Comments in Social Media. Accepted at: *Joint Conference on Digital Libraries (JCDL)*, Indianapolis, Indiana, USA, July 2013
- ICWE '12 Ke Tao, Fabian Abel, Claudia Hauff, Geert-Jan Houben. Twinder: A Search Engine for Twitter Streams. In: Proceedings of *International Conference on Web Engineering (ICWE)*, Berlin, Germany, July 2012
- ICWE '12 Fabian Abel, Claudia Hauff, Geert-Jan Houben, Ke Tao. Leveraging User Modeling on the Social Web with Linked Data. In: Proceedings of *International Conference on Web Engineering (ICWE)*, Berlin, Germany, July 2012
- HyperText '12 Fabian Abel, Claudia Hauff, Geert-Jan Houben, Richard Stronkman, Ke Tao. Semantics + Filtering + Search = Twitcident: Exploring Information In Social Web Streams. In: Proceedings of *ACM Conference on Hypertext and Social Media (HyperText)*, Milwaukee, Wisconsin, USA, June 2012

- WWW '12 Fabian Abel, Claudia Hauff, Geert-Jan Houben, Richard Stronkman, Ke Tao. Twitcident: Fighting Fire with Information from Social Web Streams. In: Proceedings of *International Conference on World Wide Web (WWW)*, Lyon, France, April 2012
- MSM at WWW '12 Ke Tao, Fabian Abel, Claudia Hauff, Geert-Jan Houben. What makes a tweet relevant for a topic?. In: Proceedings of *2nd Workshop on Making Sense of Microposts (#MSM2012)*, co-located with WWW, Lyon, France, April 2012 **Hypios award for best 'innovation-related paper'**
- TREC '11 Ke Tao, Fabian Abel, Claudia Hauff. WISTUD at TREC 2011 Microblog Track: Exploiting Background Knowledge from DBpedia and News Articles for Search on Twitter. In: Proceedings of *The Twentieth Text REtrieval Conference (TREC 2011)*, Gaithersburg, MD., USA, November 2011
- WI '11 Qi Gao, Fabian Abel, Geert-Jan Houben, Ke Tao. Interweaving Trend and User Modeling for Personalized News Recommendation. In: Proceedings of *IEEE/WIC/ACM International Conference on Web Intelligence (WI)*, Lyon, France, August 2011
- UMAP '11 Fabian Abel, Qi Gao, Geert-Jan Houben, Ke Tao. Analyzing User Modeling on Twitter for Personalized News Recommendations. In: Proceedings of *International Conference on User Modeling, Adaptation and Personalization (UMAP)*, Girona, Spain, July 2011 **(best paper award)**
- WebSci '11 Fabian Abel, Qi Gao, Geert-Jan Houben, Ke Tao. Analyzing Temporal Dynamics in Twitter Profiles for Personalized Recommendations in the Social Web. In: Proceedings of *International Conference on Web Science (WebSci)*, Koblenz, Germany, June 2011
- ESWC '11 Fabian Abel, Qi Gao, Geert-Jan Houben, Ke Tao. Semantic Enrichment of Twitter Posts for User Profile Construction. In: Proceedings of *8th Extended Semantic Web Conference (ESWC)*, Heraklion, Crete, Greece, May 2011
- UWeb at ESWC '11 Ke Tao, Fabian Abel, Qi Gao, Geert-Jan Houben. TUMS: Twitter-based User Modeling Service. In: Proceedings of *International Workshop on User Profile Data on the Social Semantic Web (UWeb)*, co-located with ESWC, Heraklion, Crete, Greece, May 2011

Awards

- 2012 Hypios award for best 'innovation-related paper' at 2nd Workshop on Making Sense of Microposts, co-located with International World Wide Web Conference (WWW). Paper: *What makes a tweet relevant for a topic?*. Co-authors: F. Abel, C. Hauff, G.-J. Houben.
- 2011 Best research paper award at International Conference on User Modeling, Adaptation and Personalization (UMAP). Paper: *Analyzing User Modeling on Twitter for Personalized News Recommendations*. Co-authors: F. Abel, Q. Gao, and G.-J. Houben.
- 2004, 2006, 2007 Annual outstanding student, National University of Defense Technology
- 2005 3rd Prize in National Competition of Mathematical Modeling. Team partners: M. Deng, X. Wang.

Voluntary Services

- February 2011 – **Staff**, *Association of Chinese Students and Scholars in the Netherlands*.
September 2012 Organising the events, communications, technical support
- October 2009 – **Planet-Lab site**, *National University of Defense Technology*.
October 2010 Technical contact, server maintenance
- April 2007 – **Microsoft Technology Club**, *National University of Defense Technology*.
January 2008 Leader of Engineering Practice
- October 2006 – **Innovative Technique and Service Group**, *School of Computer Science, National University of Defense Technology*.
June 2007 Web Server Maintenance and Web application development

Personal Interests

Photography

Sports: Cycling, Swimming, Table Tennis, Badminton

Traveling: Cycling Tour, Hiking

Music: Acoustic Guitar