



ERCIM "ALAIN BENSOUSSAN"
FELLOWSHIP PROGRAMME



Scientific Report

First name / Family name	Christoph Trattner
Nationality	Austria
Name of the <i>Host Organisation</i>	NTNU
First Name / family name of the <i>Scientific Coordinator</i>	Kjetil Norvag
Period of the fellowship	1/10/2014 to 30/09/2015

I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

The research activities during my fellowship were in the context of Web Science with a particular focus on user modelling and recommender systems. In this context, I have researched on several interesting issues, such as for instance modelling temporal effects in online communities, inventing novel predictive that take those effects into account and propose new recommendation methods that help people to find information more efficiently. In this context, I performed a number of online and offline studies and published almost 20 papers in cutting edge conferences and journals such as, ELSEVIER COMCOM, ACM WWW, ACM RECSYS, ACM IUI and UMAP. To increase my scientific network, I made use of the funding opportunities provided by ERCIM and NTNU, to visit well-known research institutions such as Yahoo! Labs, CWI, TU-Delft or TU-Ghent. I also was invited for several talks at other research institutions such as TUG and conferences to disseminate my work. Finally, I also successfully co-organized two workshops on user modelling and recommender systems at ACM SIGIR and ACM WWW and co-chaired conferences such as ACM HT, UMAP or ACM IUI. A more complete list of research activities is provided below.

Research Visits

- Yahoo Labs, Barcelona, Spain (Nov., 2014)
- CWI, The Netherlands (Jun., 2015, Sept., 2015)
- TUG, Austria (Dec., 2014, Mai, 2015)
- TU-Delft, The Netherlands (Sept., 2015)
- TU-Ghent, Belgium (Nov., 2014)
- PUC-Chile, Chile (Aug., 2015)

Talks

- 9/2015: Presentations at ACM Recsys, Vienna, Austria, Title: Good Times Bad Times: A Study on Recency Effects in Collaborative Filtering for Social Tagging
- 5/2015: Poster Presentation at ACM WWW, Florence, Italy, Title: Temporality in Online Food Recipe Consumption and Production
- 1/2015: Invited Talk at Yahoo Trondheim, Trondheim, Norway, Title: Human Cognition in Recommender Systems
- 12/2014: Invited Talk at Graz University of Technology, Graz, Austria, Title: Twitter in Academic Conferences
- 11/2014: Invited Talk at University of Ghent, Ghent, Belgium, Title: Social Computing in the area of Big Data
- 11/2014: Invited Talk at Norwegian University of Science and Technology, Trondheim, Norway, Title: Social Computing in the area of Big Data
- 11/2014: Invited Talk at Yahoo! Research, Barcelona, Spain, Title: Social Computing in the area of Big Data

Conference & Workshop Organisation

- The 21th ACM International Conference on Intelligent User Interfaces (IUI'16). Role: Publicity Co-Chair.
- The International Workshop on Social Personalization & Search (SPS'15) at the ACM SIGIR Conference (SIGIR'15), Santiago, Chile. Role: Co-Organizer
- The 25th ACM International Conference on Hypertext and Social Media (HT'15), Cyprus, Turkey. Role: Doctorial Consortium Co-Chair.
- The 23rd International Conference on User Modeling, Adaptation and Personalization (UMAP'15), Dublin, Ireland. Role: EU & International Projects Track Co-Chair.
- The 6th International Workshop on Modeling Social Media (MSM'15) at the ACM International Conference on World wide Web (WWW'15), Florence, Italy. Role: Co-Organizer.

Journal & Book Reviewing

- IEEE Transactions on AI, IEEE
- ACM Transactions on Information Systems (TOIS), ACM
- ACM Transactions on Intelligent Systems and Technology (TIST), ACM
- Information Processing & Management (IPM), Elsevier
- ACM Transactions on Internet Technology (TOIT), ACM
- International Journal of Artificial Intelligence in Education (IJAIE), Springer

PC Membership

- WWW'16-The ACM International Conference on World Web Web, 2016.

- UMAP'15-The International Conference on User Modeling, Adaptation and Personalization, 2015.
- RECSYS'15-The ACM International Conference on Recommender Systems, 2015.
- ASONAM'15-The IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 2015.
- WWW'15-The ACM International Conference on World Web Web, 2015.
- ACMMM'15-The ACM Multimedia Conference, 2015.
- ECTEL'15-The European Conference On Technology Enhanced Learning, 2015.
- RDSM'15-The International Workshop on Rumors and Deception in Social Media Detection, Tracking, and Visualization co-located with ACM WWW, 2015.
- DECAT'15-Workshop on Deep Content Analytics Techniques for Personalized and Intelligent Services co-located with UMAP, 2015.
- ICSLE'15-International Conference on Smart Learning Environments, 2015.
- INTRS'15-Joint Workshop on Interfaces and Human Decision Making for Recommender Systems co-located with ACM RecSys, 2015.
- LOCWEB'15-The International Workshop on Location and the Web co-located with ACM WWW, 2015.
- JTEL'15-Joint European Summer School for Technology Enhanced Learning, 2015.
- PALE'15-International Workshop on Personalization Approaches in Learning Environments co-located with UMAP, 2015.
- SOCINF'15-International Workshop on Social Influence Analysis co-located with IJCAI, 2015.
- WWW'14-The ACM International Conference on World Web Web, 2014.
- UMAP'14-The International Conference on User Modeling, Adaptation and Personalization, 2014.

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

Proceedings & Books (as Editor)

- Atzmueller, M., Chin, and Trattner, C. (Eds.): Mining and Modeling Ubiquitous Social Media, Lecture Notes in Computer Science, Springer, 2016.
- Atzmueller, M., Chin, A., Scholz, C. and Trattner, C. (Eds.): Mining, Modeling, and Recommending 'Things' in Social Media, Lecture Notes in Computer Science, Vol. 8940, Springer, 2015.
- Atzmueller, M., Chin, A. and Trattner, C. (Eds.): Proceedings of the 6th International Workshop on Modeling Social Media, MSM'15 co-located with ACM WWW'15, Florence, Italy, ACM, 2015.
- Trattner, C., Parra, D., Brusilovsky, P. and Marinho, L. (Eds.): Proceedings of the International Workshop on Social Personalisation & Search, SPS'15 co-located with ACM SIGIR15, Santiago, Chile, ACM, 2015.

Journals

- Trattner, C., Kowald, D., Seitlinger, P., Kopeinik, S. and Ley, T.: Modeling Activation Processes in Human Memory to Predict the Reuse of Tags, Journal of Web Science (JWS), Springer, 2015 (under review).
- Trattner, C. and Steurer, M.: Predicting Partnership in Online and Location-based Social Networks, Social Network Analysis and Mining (SNAM), Springer, 2015.

- Parra, D., Trattner, C., Gomez, M. and Hurtado, D.: Informational and Conversational Evolution of Twitter in Academic Conferences, Computer Communications Journal (COMCOM), Elsevier, 2015.
- Lin, Y., Trattner, C., Brusilovsky, P. and He, D.: The Impact of Image Descriptions on User Tagging Behavior: A Study of the Nature and Functionality of Crowdsourced Tags, Journal of the Association for Information Science and Technology (JASIST), Wiley, 2015.

Book Chapters

- Kowald, D., Kopeinik, S., Seitlinger, P., Ley, T., Albert, D. and Trattner, C.: Refining Frequency-Based Tag Reuse Predictions by Means of Time and Semantic Context, LNAI 8940, Springer, 2015.
- Lacic, E., Kowald, D., Eberhard, L., Trattner, C., Parra, D. and Marinho, L.: Utilizing Online Social Network and Location-Based Data to Recommend Items in an Online Marketplace, LNAI 8940, Springer, 2015.
- Kowald, D., Seitlinger, P., Trattner, C. and Ley, T.: Forgetting the Words but Remembering the Meaning: Modeling Forgetting in a Verbal and Semantic Tag Recommender, LNAI 8940, Springer, 2015.

Conferences

- Marinho, L., Trattner, C. and Parra, D.: Are Real-World Place Recommender Algorithms Useful in Virtual World Environments? ACM RecSys (RECSYS 2015), ACM, New York, NY, USA, 2015.
- Larrain, S., Trattner, C., Parra, D., Graells-Garrido, E. and Norvag, K.: Good Times Bad Times: A Study on Recency Effects in Collaborative Filtering for Social Tagging, ACM RecSys (RECSYS 2015), ACM, New York, NY, USA, 2015.
- Garcia, R., Gomez, D., Parra, D., Trattner, C., Kaltenbrunner, A. and Graells-Garrido, E.: Language, Twitter and Academic Conferences In Proceedings of the 26th ACM Conference on Hypertext and Social Media (HT 2015), ACM, New York, NY, USA, 2015.
- Kusmierczyk, T., Trattner, C and Norvag, K.: Temporality in Online Food Recipe Consumption and Production, In Proceedings of the ACM 2015 International Conference on World Wide Web Companion (WWW 2015), ACM, New York, NY, USA, 2015.
- Kusmierczyk, T., Trattner, C and Norvag, K.: Temporal Patterns in Online Food Innovation, In Proceedings of the ACM 2015 International Conference on World Wide Web Companion (WWW 2015), ACM, New York, NY, USA, 2015.
- Mutlu, B., Veas, E., Trattner, C and Sabol, V.: Towards a Recommender Engine for Personalized Visualizations, In Proceedings of the 23rd International Conference on User Modeling, Adaptation and Personalization (UMAP 2015), Springer, Dublin, 2015.
- Mutlu, B., Veas, E., Trattner, C and Sabol, V.: VizRec: A Two-Stage Recommender System for Personalized Visualizations, In Proceedings of the ACM 2015 International Conference on Intelligent User Interfaces Companion (IUI 2015), ACM, New York, NY, USA, 2015.

Newsletters

- Trattner, C., Kowald, D. and Lacic, E.: TagRec: Towards a Toolkit for Reproducible Evaluation and Development of Tag-Based Recommender Algorithms, ACM SIGWEB Newsletter, Spring 2015, ACM, New York, NY, USA, 2015.

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

- RECSYS'15-The ACM International Conference on Recommender Systems, Vienna, Austria, 2015.
- SIGIR'15-The 2015 ACM SIGIR Conference, Santiago de Chile, Chile.
- WWW'15-The ACM International Conference on World Web, Florence, Italy, 2015.

IV – RESEARCH EXCHANGE PROGRAMME (REP)

- 6.9.2015 – 12.9.2015: Visit to CWI Amsterdam, The Netherlands, Host: Arjen de Vries
- 22.6.2015 – 3.7.2015: Visit to CWI Amsterdam, The Netherlands, Host: Arjen de Vries