



ABCDE



Scientific Report

First name / Family name

Alejandro Bellogín

Nationality

Spanish

Name of the *Host Organisation*

Centrum Wiskunde & Informatica
(CWI)

First Name / family name
of the *Scientific Coordinator*

Arjen P. De Vries

Period of the fellowship

01/01/2013 to 31/12/2013



I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

My research activity was carried out in the Information Access group at CWI, under the supervision of Professor Arjen P. de Vries.

During the fellowship period, I had the opportunity to collaborate with people from inside of the group and also with researchers from related groups outside CWI, in particular with UvA (Universiteit van Amsterdam), UAM (Universidad Autónoma de Madrid), QMUL (Queen Mary University of London), and UGent (Universiteit Gent). This opportunity resulted in more than fifteen publications, as listed in the next section.

Specifically, I focused my research on the field of recommender systems, and particularly, in new tasks I did not consider before (news recommendation, contextual suggestion, music popularity), putting more emphasis in how the evaluation should be performed there. The focus on evaluation was developed, and further improved, when Dr. Alan Said – with whom I share several research interests – joined the group as another ERCIM fellow.

I also had the opportunity to attend interesting conferences and seminars, most of them pivotal to my research field, along with the two visits encouraged during the fellowship. Hence, and as an additional output of this post-doctoral grant, I expanded my scientific contact network.

At the moment, I stay in contact with Professor de Vries and we aim to cooperate and work together in the future.

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

During the tenure of my fellowship, my research work has resulted in 2 journal papers and 14 conference publications (3 full papers, 7 short papers, and 4 workshop papers), along with four other papers that are currently under review.

Published papers

- J. Parapar, A. Bellogín, P. Castells, A. Barreiro. *Relevance-Based Language Modelling for Recommender Systems*. Information Processing & Management 49 (4), pp. 966-980. ISSN: 0306-4573.
- A. Bellogín, J. Parapar, P. Castells. *Probabilistic Collaborative Filtering with Negative Cross Entropy*. RecSys 2013. ACM, pp. 387-390. ISBN 978-1-4503-2409-0.
- A. Said, A. Bellogín, A.P. de Vries. *News Recommendation in the Wild: CWI's Recommendation Algorithm in the NRS Challenge*. NRS 2013 at RecSys 2013.
- A. Said, J. Lin, A. Bellogín, A.P. de Vries. *A Month in the Life of a Production News Recommender System*. LL 2013 at CIKM 2013.
- A. Bellogín and A.P. de Vries. *Understanding Similarity Metrics in Neighbour-based Recommender Systems*. ICTIR 2013. ACM, pp. 48-55. ISBN 978-1-4503-2107-5.
- I. Cantador, I. Fernández-Tobías, A. Bellogín. *Relating Personality Types with User Preferences in Multiple Entertainment Domains*. EMPIRE 2013 at UMAP 2013.



- A. Said, A. Bellogín, A.P. de Vries, B. Kille. *Information Retrieval and User-Centric Recommender System Evaluation*. UMAP 2013.
- P.G. Campos, A. Bellogín, I. Cantador, F. Díez. *Time-Aware Evaluation of Methods for Identifying Active Household Members in Recommender Systems*. CAEPIA 2013. Lecture Notes in Computer Science, vol. 8109, pp. 22-31. Ed. Springer-Verlag, ISBN 978-3-642-40643-0.
- M. Martinez-Alvarez, A. Bellogín, T. Roelleke. *Document Difficulty Framework for Semi-Automatic Text Classification*. DaWaK 2013. Lecture Notes in Computer Science, vol. 8057, pp. 110-121. Ed. Springer-Verlag, ISBN 978-3-642-40131-2.
- A. Bellogín, A.P. de Vries, J. He. *Artist popularity: do web and social music services agree?* ICWSM 2013.
- A. Bellogín, P. Castells, I. Cantador. *Improving Memory-Based Collaborative Filtering by Neighbour Selection based on User Preference Overlap*. OAIR 2013.
- A. Bellogín, I. Cantador, P. Castells, F. Díez. *Exploiting Social Networks in Recommendation: a Multi-Domain Comparison*. DIR 2013. CEUR, pp. 40-41, ISSN: 1613-0073 Vol-986.

Accepted papers

- A. Bellogín, P. Castells, I. Cantador. *Neighbor Selection and Weighting in User-Based Collaborative Filtering: A Performance Prediction Approach*. Transactions on the Web.
- A. Bellogín, T. Samar, A.P. de Vries, A. Said. *Challenges on Combining Open Web and Dataset Evaluation Results: The Case of the Contextual Suggestion Track*. ECIR 2014.
- K. Hofmann, A. Schuth, A. Bellogín, M. de Rijke. *Effects of Position Bias on Click-Based Recommender Evaluation*. ECIR 2014.
- A. Said, A. Bellogín, J. Lin, A.P. de Vries. *Do Recommendations Matter? News Recommendation in Real Life*. CSCW 2014.

Papers under review

- A. Said and A. Bellogín. *Comparative Recommender System Evaluation: Benchmarking Common Frameworks*. ACM TIST.
- S. Doods, A. Bellogín, T. Depessemier, L. Martens. *Benchmarking a Dataset for Recommender Systems: The Case of MovieTweetings*. ACM TIST.
- A. Bellogín, A. Said, A.P. de Vries. *The Magic Barrier of Recommender Systems -- No Magic, Just Ratings*. UMAP
- A. Said and A. Bellogín. *You are What You Eat! Tracking Health through Recipes*. UMAP



III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

Presented at DIR workshop, Delft, The Netherlands, 26/04/2013

Presented at OAIR conference, Lisbon, Portugal, 22/05/2013-24/05/2013

Presented at UMAP conference, Rome, Italy, 10/06/2013-14/06/2013

Presented at ICWSM conference, Boston, MA, USA, 08/07/2013-10/07/2013

Co-organised 1st RecSysNL meetup, Amsterdam, The Netherlands. 19/08/2013

Presented at ICTIR conference, Copenhagen, Denmark, 29/09/2013-02/10/2013

Co-organised RepSys workshop at ACM RecSys conference, Hong Kong, China. 12/10/2013

Presented at ACM RecSys conference, Hong Kong, China, 12/10/2013-16/10/2013

Attended ERCIM ABCDE Seminar, Athens, Greece. 31/10/2013-01/11/2013

Presented at TREC conference, Gaithersburg, MA, USA, 19/11/2013-22/11/2013

IV – RESEARCH EXCHANGE PROGRAMME (REP)

My first visit as part of the Research Exchange Programme (REP) was at CNR (Consiglio Nazionale della Ricerche), Rome, Italy, 10/06/2013-14/06/2013, supervised by Professor Aldo Gangemi, senior researcher at the Institute of Cognitive Sciences and Technologies (ISCT). I, together with another ERCIM fellow, Dr. Alan Said, had fruitful discussions with Prof. Gangemi and one of his colleagues, Dr. Valentina Presutti. We also attended a seminar on analysis and modelling of user engagement.

My second visit was at NTNU (Norges Teknisk-Naturvitenskapelige Universitet), Trondheim, Norway, 03/09/2013-10/09/2013, in the Data and Information Management group, supervised by Professors Kjetil Nørkvåg and Heri Ramampiaro. There, I gave a presentation about a summary of my results in the recommendation area. I was also able to learn the current research conducted in their team and exchange ideas with professors, postdoctoral researchers, and PhD students about information retrieval, databases, and recommender systems.