



Research Networking Programmes

Short Visit Grant or Exchange Visit Grant

(please tick the relevant box)

Scientific Report

The scientific report (WORD or PDF file – maximum of eight A4 pages) should be submitted online within one month of the event. It will be published on the ESF website.

Proposal Title: Evaluation for Recommender Systems

Application Reference N°: 7283

1) Purpose of the visit

I plan to visit the Intelligent Systems Lab Amsterdam at University of Amsterdam, to work with Prof. dr. Maarten de Rijke and Mr. Zhaochun Ren on three challenges hindering the process of jointly incorporating multiple types of additional knowledge for recommendation.

(1) The first challenge is how to analyze short and sparse user comments. An underlying intuition is that each user's feedback always reflects his/her viewpoint to a specific item. However, shortness and sparseness of those comments make the viewpoint extraction difficult.

(2) The second challenge is the complicated social relations. Users follow each other on the site by personal interests or offline relationships. Some previous work presents the social matrix factorization to enhance the CF performance via adding social graph knowledge. However, inferring explicit viewpoints statistics given social relations among users and users' feedbacks is still complicated.

(3) The last challenge is the drift of temporal viewpoints. Intuitively, viewpoints on the timeline are changing over the time. Thus the prediction of a specific user's preference should also match such drift phenomenon.

2) Description of the work carried out during the visit

During my visit, I firstly met with Mr. Zhaochun Ren for 2 hours, and talked about our recent progress of the project. Then I met with Prof. dr. Maarten de Rijke and Mr.

Zhaochun Ren for about 1 hour, talking about the solutions to the main challenges in our project.

Then I met with Mr. Richard Berendsen, a PhD student working with Prof. dr. de Rijke, for 2 hours. We introduced our previous works briefly, and provided some comments for each other.

During my visit, I also met with Mr. Fei Cai and Mr. Xinyi Li for several hours, to talk about our possible collaborations in the future. Both of them are PhD students supervised by Prof. dr. de Rijke.

3) Description of the main results obtained

To tackle above three challenges, we plan to propose a hybrid latent variable model that is combining social matrix factorization and time-aware viewpoint-topic modeling. The model could include three parts: (1) time-aware viewpoint modeling; (2) social matrix factorization; (3) user-item rating prediction via the dual posterior distributions. We plan to apply collapsed Gibbs EM sampling to infer posterior distributions of our proposed model.

4) Future collaboration with host institution (if applicable)

Thanks to this visit, I plan to collaborate with Prof. dr. de Rijke on another journal paper. We would investigate the dimensionality deduction problem in learning to rank. The target journal is ACM Transactions on Information Systems or IEEE Transactions on Knowledge and Data Engineering.

Besides, Mr. Fei Cai also plans to work with me on a research paper. The topic might be the personalized document re-ranking problem. The specific approach and submission schedules are still under discussion now.

5) Projected publications / articles resulting or to result from the grant (*ESF must be acknowledged in publications resulting from the grantee's work in relation with the grant*)

Zhaochun Ren, Shuaiqiang Wang, Jari Veijalainen, Maarten de Rijke. Time-aware Collaborative Viewpoint Filtering for Recommender Systems. Target: ACM Transactions on Information Systems

6) Other comments (if any)

Kopie Kaarthouder

AMADI PANORAMA HOTEL

IJBURGLAAN 539
1087 BE AMSTERDAM



Hotel setup # Reservations # Front desk # Accounting # Night audit # Rooms # Reporting # Tools

Billing : Reservation folio report

Terminal: C7429989
Merchant: 102265943962
Periode: 5103 Transactie: 00000647
VISA
Kaart: xxxxxxxxxxxx1301
Exp. Datum: 10/17

BETALING

13/04/2015 12:48 Auth. code: 121574

Totaal: 345,58 EUR

Handtekening:

AKKOORD

Back Advanced folio Print Preview Print Expo

Shuaiqiang Wang
7366 2nd Ring Road East
250101
Jinan
Finland

Amadi Panorama Hotel, Amsterdam, The Netherlands - 14/04/2015

Confirmation number		857	
Room	724	Persons	1
Arrival	15/04/2015	Cashier	1
Departure	18/04/2015	Cashier name	Dagkassa
Reference	3134049	TA Debitor no	
Name of guest	Shuaiqiang Wang		

Advanced Folio INFO

Date	Text	EURO
15/04/2015	Logies	88.35
16/04/2015	Logies	86.03
17/04/2015	Logies	109.74
15/04/2015	Toeristenbelasting	5.17
16/04/2015	Toeristenbelasting	5.05
17/04/2015	Toeristenbelasting	6.24
15/04/2015	Ontbijt15	15.00
16/04/2015	Ontbijt15	15.00
17/04/2015	Ontbijt15	15.00
13/04/2015	visa	-345.58
Balance		0.00

	Revenue	Vat
6.00% Deductable VAT	310.49	18.63

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15/04/2015	Toeristenbelasting	5.17
16/04/2015	Toeristenbelasting	5.00
17/04/2015	Toeristenbelasting	6.19
15/04/2015	Ontbijt15	15.00
16/04/2015	Ontbijt15	14.00
17/04/2015	Ontbijt15	14.00
13/04/2015	visa	-345.58
Balance		0.00

	Revenue	Vat
6.00% Deductable VAT	310.59	18.64



ESF Research Networking Programmes

Short Visit Grant Acceptance Form

APPLICATION

Reference N°

7283

Submission date

04/05/2015

ESF ACTIVITY

Unit(s)

PESC

Activity Title

Evaluating Information Access Systems

Activity Acronym

ELIAS

PROJECT

Title

Evaluation for Recommender Systems

Duration (days)

4

Date of visit (starting date)

15/04/2015

Applicant

Dr. Wang Shuaiqiang, Jyväskylä, FI (shuaiqiang.wang@jyu.fi)

HOST INSTITUTE(s)

Professor de Rijke, Amsterdam, NL (derijke@uva.nl)

BUDGET GRANTED

Travel costs

450 €

Subsistence Allowance

340 €

TOTAL MAXIMUM ESF FUNDING

790 €



ESF Research Networking Programmes

Short Visit Grant Acceptance Form

APPLICATION

Reference N°

7283

Submission date

04/05/2015

ACCEPTANCE

- I intend to avail myself of the funds awarded to me Yes
- I certify that I will be using the money received for the purpose for which the funds have been awarded in accordance with the ESF Guidelines Yes
- I acknowledge having read the ESF Guidelines carefully, including conditions of award and penalties, and I confirm that I adhere to them Yes

BANK COORDINATES

▶ Account Holder:

Wang Shuaiqiang
Helokantie 5 H A 7
40640 Jyväskylä , FI

▶ Bank Details:

Nordea
Kauppakatu 18
40100 Jyväskylä , FI

▶ IBAN FI4010453500931547

▶ SWIFT NDEAFIHH

▶ Remittance Ref.

SIGNATURE

Date: May 4, 2015

Applicant's signature: Wang, Shuaiqiang