Guanliang Chen

PhD Candidate

EEMCS, Web Information Systems, P.O. Box 5031, 2600 GA Delft, The Netherlands

(+31) 06-22-664-665 | guanliang.chen@tudelft.nl | https://angusglchen.github.io/

Education

Delft University of Technology — *Delft, The Netherlands*

PhD Candidate — *03/2015 - 03/2019*

- Thesis Subject: Large-scale Learning Analytics

Hong Kong Baptist University — *Hong Kong, P.R.China*

Exchange Research Student — *04/2013 - 01/2014*

South China University of Technology — *Guangzhou, P.R.China*

M.E. in Software Engineering — *09/2011 - 01/2014*

- GPA: 3.71/4.0; Ranking: 3/96 (Top 3%)

South China University of Technology — *Guangzhou, P.R.China*

B.E. in Software Engineering — *09/2007 - 07/2011*

- GPA: 3.48/4.0; Ranking: 21/278 (Top 8%)

Research Interests

Learning Analytics · Web Science · User Modeling · Recommender Systems · Text Mining · Machine Learning

Research Experience

Project: Large-scale Learning Analytics — *Delft, The Netherlands*

Host: Delft University of Technology; Advisor: Prof. Geert-Jan Houben; Role: Core investigator

- Investigate to what extent learning transfer insights gained in workplace and classroom settings hold in the MOOC context;
- Explore the feasibility of paying students to take MOOCs so as to improve their engagement in the course;
- Explore the kind of information relevant to learning in MOOCs the social Web offers about users;
- Investigate the impact of personality in the MOOC environment.

Project: Research on Incorporating Feature-level Opinion Mining Outcomes into Model- ing/Eliciting Potential Customers' Multi-criteria Preferences and Generating High-value Products' Recommendation in E-commerce — *Hong Kong, P.R. China*

Host: Hong Kong Baptist University; Advisor: Dr. Li Chen; Role: Co-investigator

- Developed a contextual recommendation algorithm based on user-generated reviews;
- Proposed and demonstrated that user profile can be depicted more accurately by differentiating context-independent and context-dependent preferences;
- Tested different preference inference algorithms to capture users' interest through review analysis;
- Designed a co-clustering algorithm to locate similar users and items, also compared the role played by multi-criteria ratings with that by ratings mined from reviews during recommendation;
- Compared the effectiveness of different opinion mining techniques through experiments.
- Surveyed different types of review-based recommender systems.

Project: Research on Recommendation Mechanism and Related Techniques in Multi-relational Social Networks — *Guangzhou, P.R. China*

Host: South China University of Technology; Advisor: Dr. Jian Chen; Role: Co-investigator

- Developed a social recommendation algorithm based on multi-relational analysis;
- Investigated different linear regression approaches in revealing the underlying interaction among users in multi-relational social networks:
- Tested the traditional collaborative filtering and related social recommendation algorithms.

Professional Activities

- **Program Committee**, The 16th International Conference on Web-based Learning (ICWL'17), 2017
- **Co-organizer**, Workshop on Integrated Learning Analytics of MOOC Post-Course Development, co-located with the 7th International Conference on Learning Analytics and Knowledge (LAK '17), 2017
- **Program Committee**, Workshop on FutureLearn data: what we currently have, what we are learning and how it is demonstrating learning in MOOCs, co-located with the 7th International Conference on Learning Analytics and Knowledge (LAK '17), 2017
- **Invited reviewer**, IEEE Transactions on Systems, Man and Cybernetics: Systems, 2017
- **Co-organizer**, The 15th Dutch-Belgian Information Retrieval Workshop, 2016
- **Invited reviewer**, ACM Computing Surveys, 2016
- **Senior PC Member**, The 3rd International Workshop on Semantic Computing and Personalization (SeCoP 2016), co-located with the 21th International Conference on Database for Advanced Application (DASFAA), 2016
- **Invited reviewer**, International Journal of Distance Education Technologies (IJDET), 2015
- **Sub-reviewer**, The 23rd International World Wide Web Conference (WWW), 2014

Selected Awards

- UMAP Student Travel Grant (2014, 2016)
- Research Grant Studentship by Hong Kong Baptist University (2013 - 2014)
- Chinese Government Scholarship for Graduates (2012 - 2013)

Supervision

- 2016 - 2017, Yingying Bao, Msc, Detecting Multiple-Accounts Cheating in MOOCs

Publication

– **2017** –

- **Guanliang Chen**, Dan Davis, Markus Krause, Claudia Hauff and Geert-Jan Houben (2017). Buying Time: Enabling Learners to become Earners with a Real-World Paid Task Recommender System. In Proceedings of the 7th International Conference on Learning Analytics and Knowledge, pp. 578–579, Vancouver, Canada. LAK'17. (Poster paper)
- Dan Davis, Ioana Jivet, René F. Kizilcec, **Guanliang Chen**, Claudia Hauff, Geert-Jan Houben (2017). Follow the Successful Crowd: Raising MOOC Completion Rates through Social Comparison at Scale. In Proceedings of the 7th International Conference on Learning Analytics and Knowledge, pp. 454–463, Vancouver, Canada. LAK'17.

– **2016** –

- **Guanliang Chen**, Dan Davis, Markus Krause, Efthimia Aivaloglou, Claudia Hauff and Geert-Jan Houben. Can Learners be Earners? Investigating a Design to Enable MOOC Learners to Apply their Skills and Earn Money in an Online Market Place. IEEE Transactions on Learning Technologies.
- Dan Davis, **Guanliang Chen**, Tim van der Zee, Claudia Hauff, Geert-Jan Houben (2016). Retrieval Practice and Study Planning in MOOCs: Exploring Classroom-Based Self-Regulated Learning Strategies at Scale. In Proceedings of the 11th European Conference on Technology-Enhanced Learning, Lyon, France. EC-TEL '16. **[Best Student Paper Award]**
- **Guanliang Chen**, Dan Davis, Claudia Hauff and Geert-Jan Houben (2016). On the Impact of Personality in Massive Open Online Learning. In Proceedings of the 24th ACM International

Conference on User Modeling, Adaptation and Personalisation, pp. 121–130, Halifax, Canada. UMAP'16, ACM.

- Dan Davis, **Guanliang Chen**, Claudia Hauff, Geert-Jan Houben (2016). Gauging MOOC Learners' Adherence to the Designed Learning Path. In Proceedings of the 9th International Conference on Educational Data Mining, Raleigh, North Carolina, USA. EDM '16.
- **Guanliang Chen**, Dan Davis, Jun Lin, Claudia Hauff and Geert-Jan Houben (2016). Beyond the MOOC platform: Gaining Insights aboutLearners from the Social Web. In Proceedings of the 8th ACM Conference on Web Science, pp. 15–24, Hannover, Germany. WebSci '16, ACM.
- **Guanliang Chen**, Dan Davis, Claudia Hauff and Geert-Jan Houben (2016). Learning Transfer: Does It Take Place in MOOCs? An Investigation into the Uptake of Functional Programming in Practice. In Proceedings of the Third ACM Conference on Learning @ Scale, pp. 409–418, Edinburgh, UK. L@S'16, ACM. **[Honorable Mention Award]**
- Dan Davis, **Guanliang Chen**, Ioana Jivet, Claudia Hauff, Geert-Jan Houben (2016). Encouraging Metacognition Self-Regulation in MOOCs through Increased Learner Feedback. In Learning Analytics and Knowledge 2016 Learning Analytics for Learners Workshop.

– 2015 –

- **Guanliang Chen**, Li Chen (2015). Augmenting service recommender systems by incorporating contextual opinions from user reviews. User Modeling and User-Adapted Interaction Journal (UMUAI), Special Issue on User Modeling in Ubiquitous Computing Vol. 25(3):295-329.
- Li Chen, **Guanliang Chen**, Feng Wang (2015). Recommender systems based on user reviews: the state of the art. User Modeling and User-Adapted Interaction Journal (UMUAI) Vol. 25(2):99-154.

– 2014 –

- **Guanliang Chen**, Li Chen (2014). Recommendation Based on Contextual Opinions. In Proceedings of 22nd International Conference on User Modelling, Adaption and Personalisation, pp. 61-73, Aalborg, Denmark. UMAP'14, Springer. **[Best Student Paper Nominee]**

– 2012 –

- Jian Chen, **Guanliang Chen**, Haolan Zhang, Jin Huang, Gansen Zhao (2012). Social Recommendation Based on Multi-relational Analysis. In IEEE/WIC/ACM International Conferences on Web Intelligence and Intelligent Agent Technology, pp. 471-477, Macau, China. WI-IAT'12, IEEE.