Publications of Chung-Wei Hang

JOURNAL PAPERS [1] [2]

[J1] **Chung-Wei Hang** and Munindar P. Singh. "Generalized Framework for Personalized Recommendations in Agent Networks." *Journal of Autonomous Agents and Multi-Agent Systems* (JAAMAS). In press.
(Rank A, IF: 2.103, SCIE, EI)

- Design a general framework that recommends trustworthy interaction partners reached by specified trust relation patterns

[J2] **Chung-Wei Hang** and Munindar P. Singh. "A Probabilistic Approach for Maintaining Trust Based on Evidence." *Journal of Artificial Intelligence Research (JAIR)*, Volume 40, pages 221–267, 2011.
(Rank A, IF: 1.691, SCI, EI)

- Propose a trust update approach to (a) track dynamic behavior of agents, and (b) evaluate reputation providers based on their reputation reports

[J3] **Chung-Wei Hang** and Munindar P. Singh. "Trustworthy Service Selection and Composition." *ACM Transactions on Autonomous and Adaptive Systems (TAAS)*, Volume 6, Issue 1, pages 5:1–5:17, February 2011.
(Rank B, IF: 1.000, SCIE, EI)

- Study how reputation of constituent services can be evaluated and rewarded/penalized based on the uality observations from compositions in service-oriented environments

[1] All journal/conference rankings are based on ERA 2010, `http://www.arc.gov.au/era/era_2010/archive/era_journal_list.htm`.

[2] The *impact factor* (IF) is based on Journal Citation Reports from Thomson Reuters Web of Knowledge.

CONFERENCE PAPERS

[C4] **Chung-Wei Hang** and Munindar P. Singh. "From Quality to Utility: Adaptive Service Selection Framework." *Proceedings of the* 8^{th} *International Conference on Service Oriented Computing (ICSOC)*, pages 456–470. San Francisco, USA, December 2010.
(Rank A, Top conference on service-oriented computing)

- Devise a utility-driven service selection algorithm that considers both service provider's quality and service consumers' preferences

[C5] **Chung-Wei Hang** and Yonghong Wang and Munindar P. Singh. "Operators for Propagating Trust and their Evaluation in Social Networks." *Proceedings of the* 8^{th} *International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*, pages 1025–1032. Budapest, Hungary, May 2009.
(Rank A, Top conference on multiagent systems)

- Develop an approach to propagate trust through social networks

[C6] **Chung-Wei Hang** and Yonghong Wang and Munindar P. Singh. "An Adaptive Probabilistic Trust Model and its Empirical Evaluation (Short Paper)." *Proceedings of the* 7^{th} *International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*, pages 1485–1488. Estoril, Portugal, May 2008.
(Rank A, Top conference on multiagent systems)

- Present a general trust model that supports prediction, propagation, and update trust in multiagent systems

WORKSHOP PAPERS

[W7] **Chung-Wei Hang** and Munindar P. Singh. "Trust-based Recommendation based on Graph Similarity." *The* 13^{th} *AAMAS Workshop on Trust in Agent Societies*. Toronto, Canada, May 2010. (Short version of [J1])

[W8] **Chung-Wei Hang** and Munindar P. Singh. "Selecting Trustworthy Service in Service-Oriented Environments." *The* 12^{th} *AAMAS Workshop on Trust in Agent Societies*. Budapest, Hungary, May 2009. (Short version of [J3])

[W9] **Chung-Wei Hang**. "A decentralized multi-agent service lookup mechanism: cooperation and communication without center agents in RoboCup rescue." *The* 2^{nd} *International Workshop on Collaboration Agents*, pages 21–28, Bejing, China, September 2004. (Short version of [T11])

DISSERTATION AND THESIS

[T10] **Chung-Wei Hang**. "Probabilistic Trust Models for Social and Service Networks." *PhD Dissertation*. North Carolina State University, April 2011.

[T11] **Chung-Wei Hang**. "A Decentralized Multi-agent Service Lookup Mechanism." *Master Thesis*. National Chiao Tung University, June 2004.

UNDER REVIEW

[D12] **Chung-Wei Hang** and Munindar P. Singh. "Generalized Trust Propagation with Limited Evidence." September 2011.

- Generalize trust propagation approaches to incorporate sparse evidence in a collaborative filtering manner