

The Computer Science Program at CSU Channel Islands presents:

Development of a Reading Material Recommender System Based On a Design Science Research Approach

A talk by

Dr. Evren Eryilmaz

Thursday, March 15, 2018, 2pm – 3pm in SIE 1111.

Abstract: Collaborative learning is an idea-centered pedagogy that plays a vital role in curriculum recommendations for many disciplines. Asynchronous threaded online discussions is a popular tool to facilitate collaborative learning. A common problem when utilizing this popular tool for collaborative learning purposes is conversational overload, which underscores students', especially those with pressing work and home obligations, feelings of being overwhelmed by a large number of messages. To cope with conversational overload, students sometimes resort to conversational overload coping strategies, such as paying less attention to some messages, scanning for points in a discussion where they can most easily contribute, and producing simpler or erroneous responses. Inevitably, these conversational overload coping strategies can have deleterious effects on successful collaborative learning. This design science research reports on the construction and preliminary evaluation of a recommendation functionality integrated into an asynchronous threaded online discussion system. Drawing on Clark's communication theory, the proposed recommendation functionality aims to reduce the amount of students' conversational overload coping strategies to help them reap the benefits of collaboration. The investigation centers on two sections of an online human-computer interaction course. Preliminary results show that the proposed recommendation functionality had high predictive accuracy and perceived usefulness. Moreover, the proposed recommendation functionality decreased students' conversational overload coping strategies in collaborative learning. Theoretical and practical implications will be discussed.

Evren Eryilmaz, Ph.D., is an assistant professor of Management Information Systems at the California State University Sacramento. He earned his Ph.D. in Information Systems and Technology from Claremont Graduate University. His current research revolves around designing and evaluating recommender systems to reduce conversational overload in online collaborative work. More specifically, he is interested in design science research, persuasive design, business analytics, and big data management. His articles have appeared in the Journal of the Association for Information Systems, Communications of the Association for Information Systems, AIS Transactions of Human Computer Interaction, and International Journal of Computer Supported Collaborative Learning. He has presented his research at major conferences such as the International Conference on Information Systems (ICIS), the Hawaii International Conference on System Sciences (HICSS), and the Americas Conference on Information Systems (AMCIS). He received SIGED-IAIM Best IS Education Award at ICIS in 2010 and was nominated for best paper awards at HICSS in 2010, 2012, and 2014.