## **GRADUATE STUDENT RESEARCH SEMINAR SERIES (2018)**

## A FUZZY SURVEY INSTRUMENT FOR MEASURING REGRET IN DECISION-MAKING

SPEAKER: LONGSHENG JIANG

Obtaining a quantitative human-like decision-making model requires eliciting data from human subjects. In the decision-making scenario, these data are related to human preference to different options. When people conceive ideas, they do it in terms of natural language rather than in calculation. Also, people communicate with outside world in terms of natural language rather than numbers. This feature motives us to use fuzzy set theory to model the information fed by human subjects. In this work, a graphical survey instrument based on fuzzy set theory is designed for quantitatively measuring regret theory. Several psychological effects are considered in the design. The performance of this instrument is satisfactory because the measured model can predict human decision-making with high accuracy.

**MONDAY, SEPTEMBER 10 3:00 PM** 

**EIB 132**