

CALL FOR PAPERS

ACM Transactions on Interactive Intelligent Systems (TiiS)

Special Issue on Interactive Visual Analysis of Human and Crowd Behaviors



Overview

The continuous growth and adoption of communication, mobility, and sensing technologies have spurred human data proliferation from a large number of diverse data sources, which has offered unprecedented opportunities to study human behaviors and their relationships to various types of systems and services. The analysis of human behaviors has impacted many domains, ranging from business, health, security, to education and disaster management. For example, marketers analyze website traffic data for behavioral insights to identify potential marketing targets, while healthcare providers augment clinical data with patients' social networking behavior to improve health plans and clinical outcomes. While many statistical techniques have been developed, people often find them insufficient to provide behavioral insights, especially into how individuals or crowds will behave and why, because behavioral context is missing from most statistical analyses. Interactive visual analytic systems that couple interaction design with data analysis, and show analytic results with behavioral context have provided new ways to overcome the challenge. This special issue aims at featuring recent progress and new results in this emerging area.

Scope, Description, and More Information

This special issue invites submissions featuring original research relating to interactive visual analysis of human and crowd behavior. A suitable submission must also demonstrate its relevance to the TiiS journal by exhibiting the two defining characteristics of an interactive intelligent system: intelligence and interactivity. The topics of interest include, but are not limited to:

- New visual analytics coupling human interaction and machine learning techniques
- New system and design for supporting behavioral analysis, e.g., summarizing behavior patterns, detecting behavior anomalies, etc.
- New system and design for human and social behavioral applications, e.g., disaster response and management, health analytics, smart city, etc.
- Evaluation framework for assessing the effectiveness and utility of new systems
- Design processes for developing interactive visual analysis of human behaviors
- Interactive social network analysis (i.e., analysis users' social interaction behaviors)
- Interactive visual analysis of collective / ego centric social behaviors
- Interactive visual analysis of crowd's mobility patterns
- Interactive visual analysis of egocentric behaviors
- Interactive visual analysis of users' sentiments and emotions

Schedule

- Full paper submission deadline: Jan 15th, 2017
- First author notification: April 15th, 2017
- Revised paper due: July 15th, 2017
- Final author notification: Aug. 30, 2017
- Expected publication: Winter 2017

Guest Editors

Nan Cao (nan.cao@gmail.com), TongJi University, Shanghai, China

Yu-Ru Lin (yuruliny@gmail.com), University of Pittsburgh, Pittsburgh, USA

Check out <http://tiis.acm.org/authors.cfm> for author information and submission details.