

## The TCU AIS Summer Data Science Competition

The TCU chapter of the Association of Information Systems (AIS) with support from the Neeley Alcon Career Center is sponsoring a summer data science competition open to rising junior and rising senior BIS students. Students participating in the competition will be asked to propose and evaluate relationships between the content of tweets and economic activity. Specifically, students will:

- Retrieve data via API's from Twitter, the Department of Commerce's Bureau of Economic Analysis, and other sources
- Apply text analysis and natural language processing techniques to identify patterns in the tweets
- Explore relationships (leading, coincident, and lagging) between the tweet patterns and economic data
- Create visualizations of these relationships and post the visualizations (with explanations) on the web

Students will select the relationships they wish to examine. For instance, a team might evaluate general public tweet sentiment and explore how the sentiment relates to consumer expenditures. Another team might examine tweets related to an industry or company key words and how tweet patterns relate to changes in stock prices. Students are encouraged to participate in teams (with team size limited to four students) but can choose to work independently.

We will ask a panel of judges to rate the posted visualizations. The members of the winning team will receive a prize provided by the career center and will meet with the judges for feedback. Students should consider keeping their work posted online after the competition with related links on their resumes.

While the competition will require technical effort, no technical background is required to participate. Kelly Slaughter, the AIS faculty advisor, will meet with the teams at multiple checkpoint sessions to share the necessary knowledge to complete each step and provide guidance through the competition. At least one member from each team must be present at each of the sessions, either in person (if allowed) and via Zoom.

You do not need to be a member of AIS to participate, but we would love to have you as a member (\$20/semester)! If you are interested, please contact Kelly Slaughter at [kelly.slaughter@tcu.edu](mailto:kelly.slaughter@tcu.edu) before April 30, 2020. If at least twenty students are interested in participating, we will go forward with the competition and release a schedule with dates for meeting and judging.

### **AIS advisor / Faculty mentor, Kelly Slaughter, PhD**

Professor Slaughter serves as the AIS faculty advisor and will be the faculty sponsor for the competition. Professor Slaughter worked in operations analysis for Humana/Concentra (working primarily with the language R) and provides data science consulting, most recently working on predictive stroke models for a healthcare start-up. Professor Slaughter has taught graduate level and undergraduate level classes in analytics, visualization, and big data since 2015.