

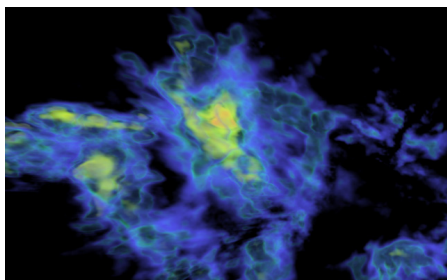
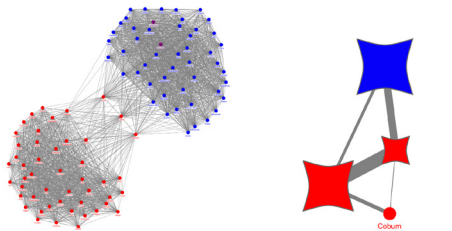
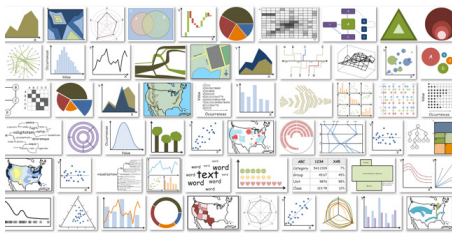
# NORTHEASTERN UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCE

## PHD PROGRAMS

- *PhD in Computer Science*
- *PhD in Personal Health Informatics*
- *PhD in Network Science*
- *PhD in Information Assurance*

## LEARN MORE ABOUT DATA VISUALIZATION AT CCIS

[visualization.ccis.northeastern.edu](http://visualization.ccis.northeastern.edu)



## DATA VISUALIZATION AT CCIS

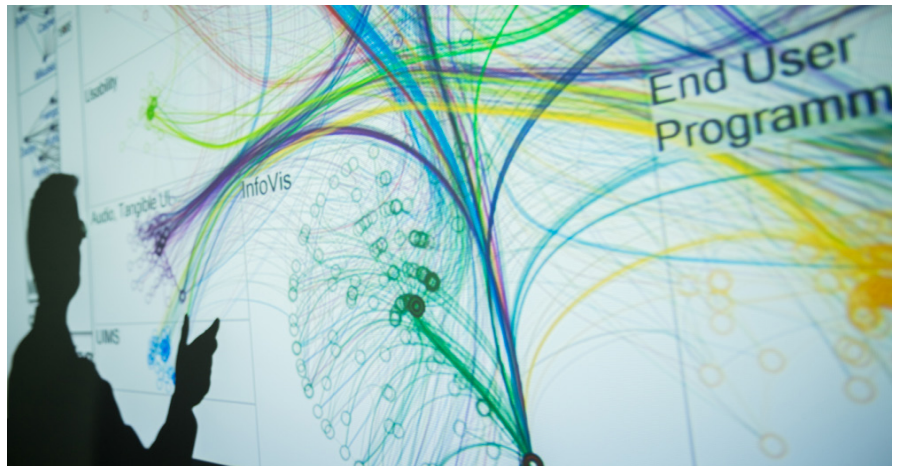
Data visualizations leverage the impressive human visual bandwidth so users can spot clusters, gaps, trends, outliers in data within a fraction of a second. Interactive visualizations can be highly effective tools for exploring complex data, gaining confidence in algorithm results, and communicating findings with others.

We have a growing focus on visualization at Northeastern University, and we have a rich tradition of collaborating on meaningful problems with invested partners.

Professors Dunne and Borkin have five open and funded PhD positions for visualization projects across four PhD programs. Email us to learn more!

### *Areas of Investigation*

- Perception and cognition
- Data storytelling
- Analytic provenance
- Exploratory data analysis
- Coordinated views and interactions
- Tree/hierarchical data
- Network data
- Multidimensional data
- Geospatial data
- Uncertain, missing, erroneous data
- Temporal event sequences
- User interface design
- Interaction design
- Evaluation methodologies



### *Specific Domains of Interest*

- **Healthcare diagnostic and treatment decision support** including diabetes, neurology, ophthalmology
- **Digital humanities**, including networks of concepts in humanities texts, text and timeline visualizations
- **Epidemiology**, including the spread of infectious disease
- **Cybersecurity**, including unmanned autonomous system analysis
- **Astronomy and physics**, including 3D visualization and multidimensional



**MICHELLE BORKIN**  
Assistant Professor  
[m.borkin@northeastern.edu](mailto:m.borkin@northeastern.edu)



**CODY DUNNE**  
Assistant Professor  
[c.dunne@northeastern.edu](mailto:c.dunne@northeastern.edu)