

# About myself

- Kamran Sedig (come-run se-deeg)
  - Joint appointment between Computer Science & Information and Media Studies
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- MC 420

# My research

- Interdisciplinary, at the cross-roads of
  - Human-centered computing
  - Information & data science
  - Cognitive science
  - Systems theory
  - Design (interaction, visualization, cognitive, game, motivation)
- Investigate how to
  - Design of interactive software tools that support data-intensive complex human tasks
    - Data analysis & interpretation, investigation, problem solving, planning, decision making, ...

# Sub-areas and applications of my research

- Human-data interaction & human-steered analytics
- Design of interactive visualization tools
  - Data/information visualization
  - Data and visual analytics
  - Geospatial visualizations
- Data-intensive complex activities
  - Health & medical informatics
  - Decision-support tools
  - Design of cognitive games
  - Cyberlearning
  - Interactive reasoning
- Interface design
- Information artifacts and tools
- ...

New book



MORGAN & CLAYPOOL PUBLISHERS

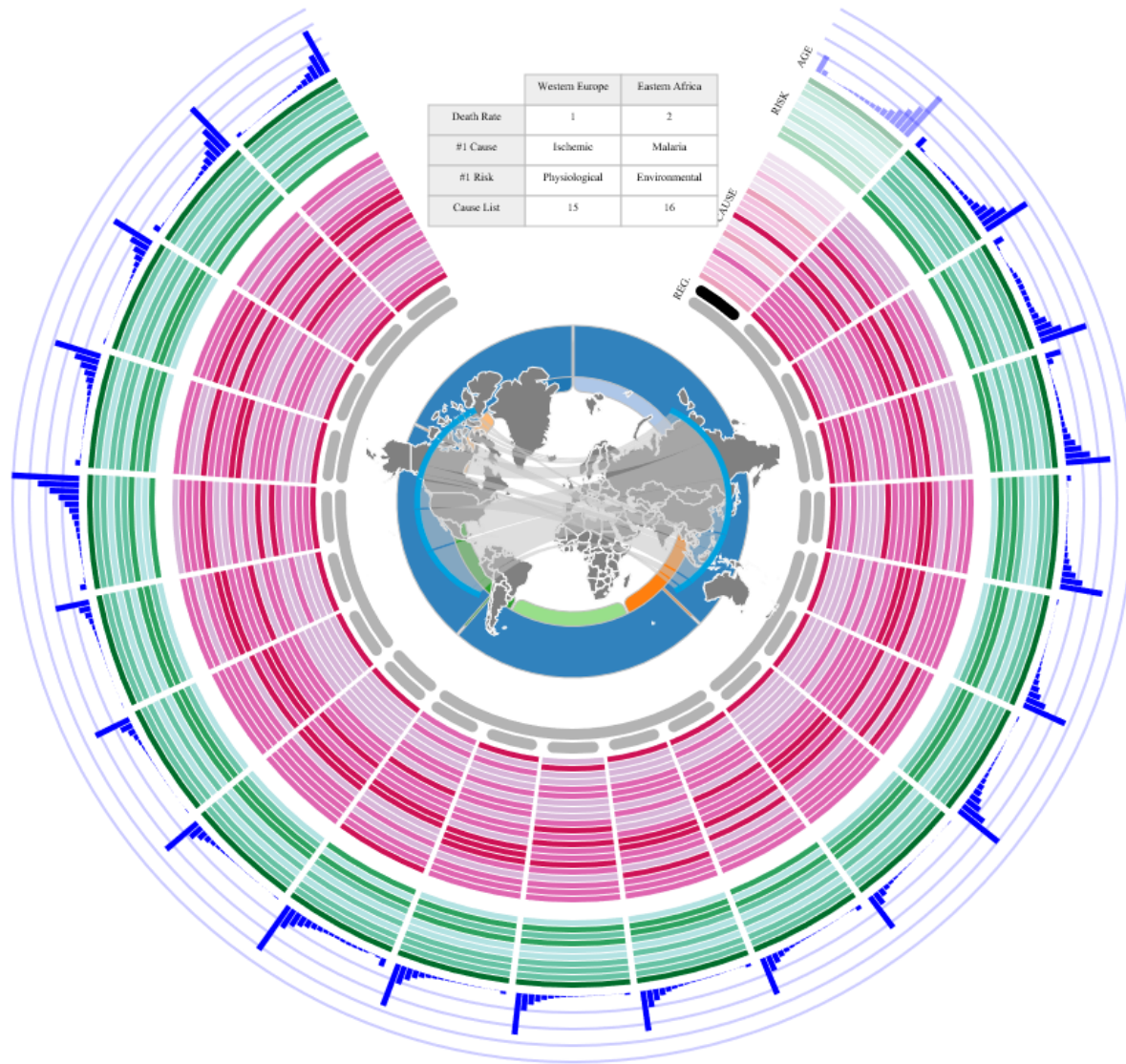
# Design of Visualizations for Human-Information Interaction

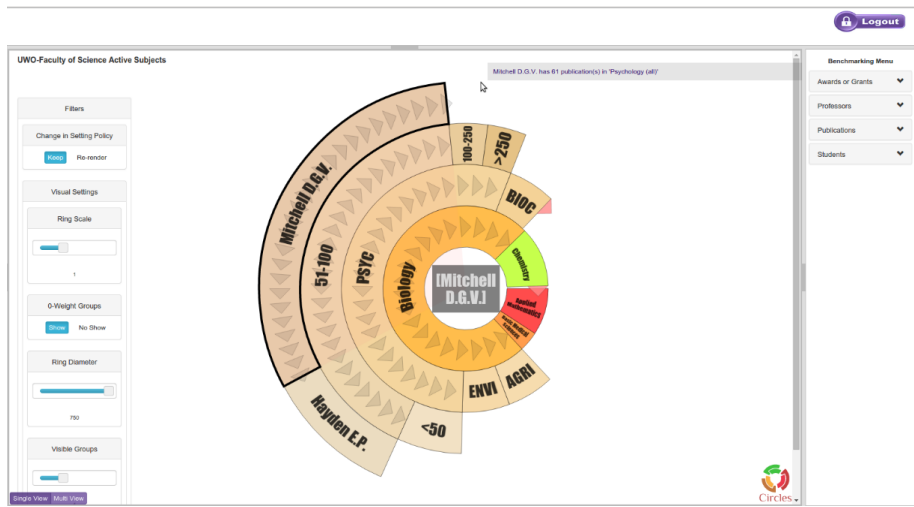
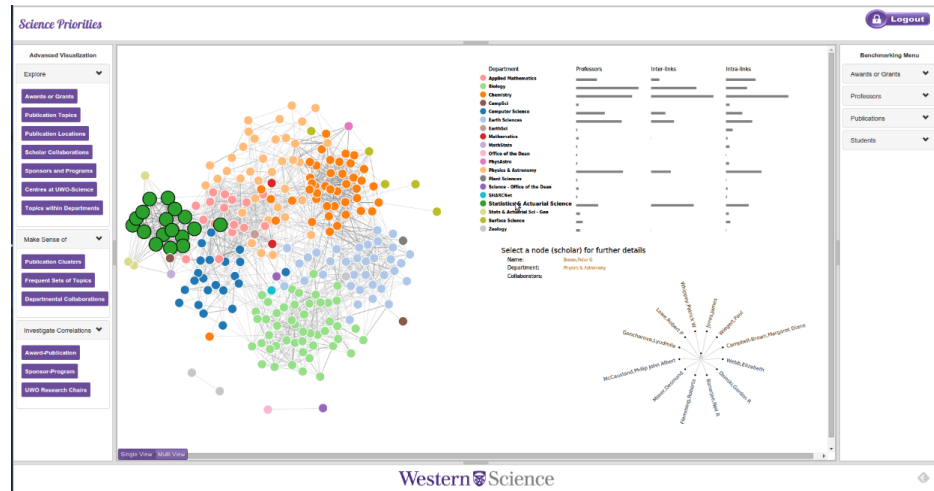
*A Pattern-Based Framework*

Kamran Sedig  
Paul Parsons

*SYNTHESIS LECTURES ON VISUALIZATION*

Niklas Elmqvist & David Ebert, *Series Editors*

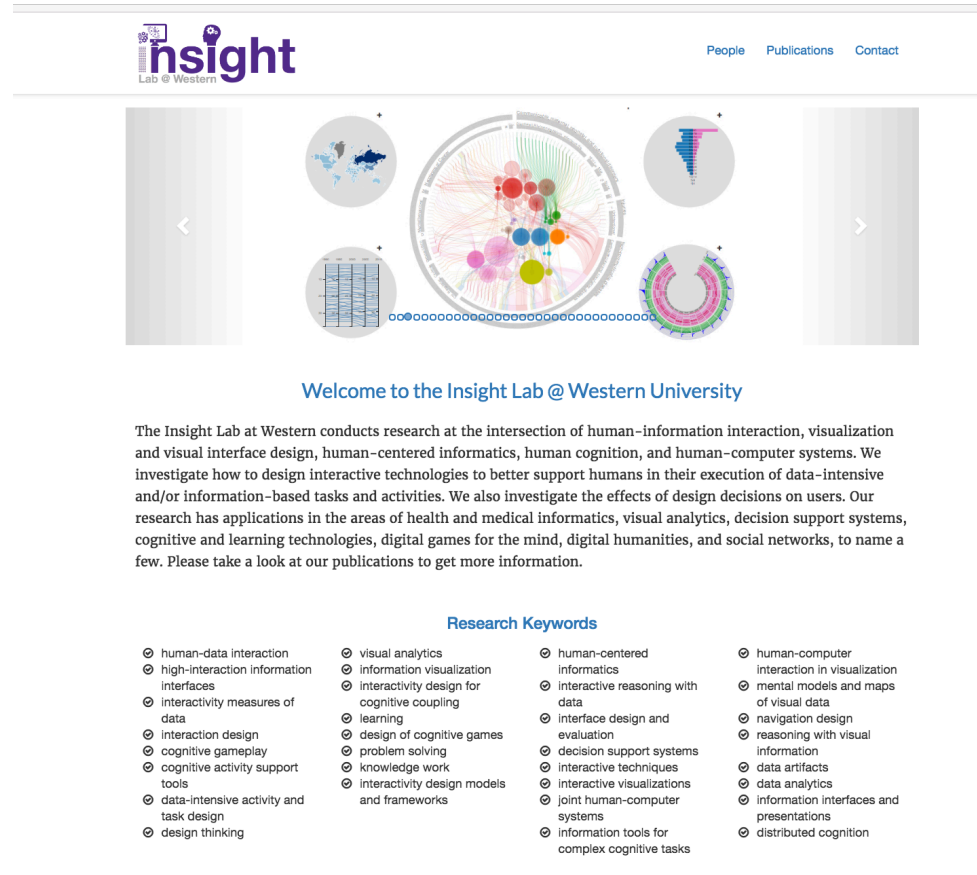




# My research

- Visit our research lab:

[insight.uwo.ca](http://insight.uwo.ca)



**insight**  
Lab @ Western

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Welcome to the Insight Lab @ Western University

The Insight Lab at Western conducts research at the intersection of human-information interaction, visualization and visual interface design, human-centered informatics, human cognition, and human-computer systems. We investigate how to design interactive technologies to better support humans in their execution of data-intensive and/or information-based tasks and activities. We also investigate the effects of design decisions on users. Our research has applications in the areas of health and medical informatics, visual analytics, decision support systems, cognitive and learning technologies, digital games for the mind, digital humanities, and social networks, to name a few. Please take a look at our publications to get more information.

**Research Keywords**

- ① human-data interaction
- ① high-interaction information interfaces
- ① interactivity measures of data
- ① interaction design
- ① cognitive gameplay
- ① cognitive activity support tools
- ① data-intensive activity and task design
- ① design thinking
- ① visual analytics
- ① information visualization
- ① interactivity design for cognitive coupling
- ① learning
- ① design of cognitive games
- ① problem solving
- ① knowledge work
- ① interactivity design models and frameworks
- ① human-centered informatics
- ① interactive reasoning with data
- ① interface design and evaluation
- ① decision support systems
- ① interactive techniques
- ① interactive visualizations
- ① joint human-computer systems
- ① information tools for complex cognitive tasks
- ① human-computer interaction in visualization
- ① mental models and maps of visual data
- ① navigation design
- ① reasoning with visual information
- ① data artifacts
- ① data analytics
- ① information interfaces and presentations
- ① distributed cognition

# Graduate students (10)

- 1 Post Doc
- 5 PhD in Computer Science
- 2 PhD in Health Information Science
- 2 PhD in Information Science
- Areas:
  - Visual analytics; medical visual analytics; human-data interaction; visualization design; role of information & cognition in evidence-based medicine; public health; ...



# Fall 2017 (CS 9855a)

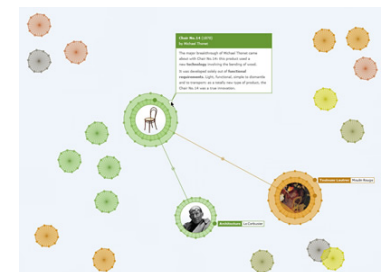
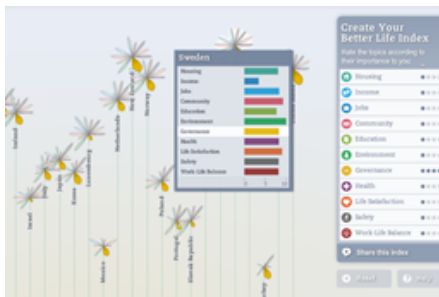
- **Topics in health informatics**
  - will examine topics related to health informatics— with particular emphasis on health informatics tools, big data in healthcare, presentation of health data, analytics methods and their role in healthcare, and design of health informatics tools
  - cross-listed (CS & Information Science & Health Information Science)
- **Mondays, 9-12 (Rm. MC 320)**
  - Start date: September 11 (be on time)

## Evaluation scheme for CS 9855a

- 1. Paper summaries (9) – 18%
- 2. Paper discussion facilitation (2) – 24%
- 3. HI tool presentation – 12%
- 4. Research report -- 16%
- 5. Participation in class discussions – 30%

# Winter 2018

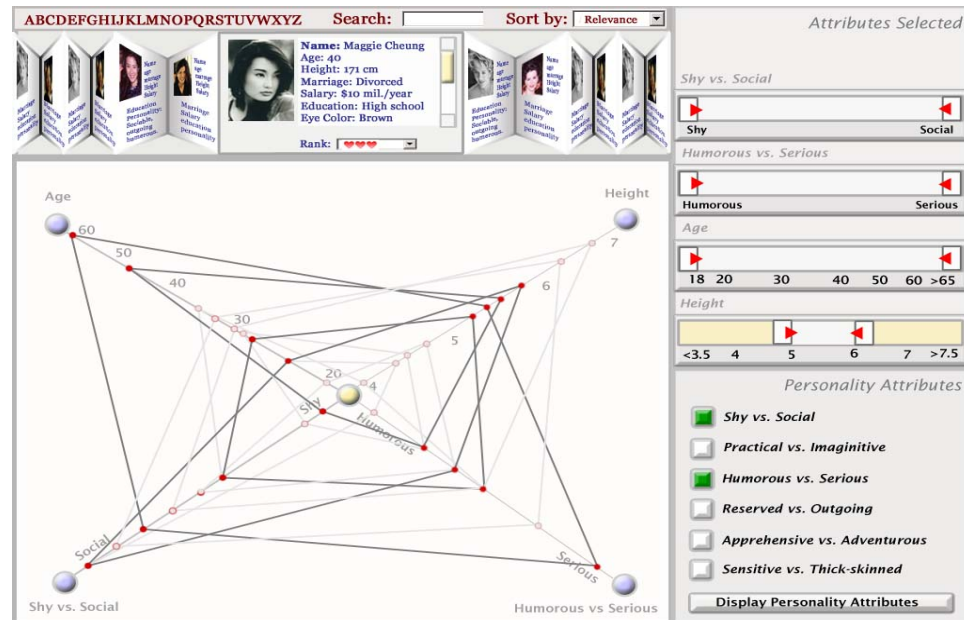
- Information Visualization (9639A)
  - 1 cross-listed course (CS & Library & Information Science)



# Winter 2018

- Human-Computer Interaction (9521B)
  - Conceptualization, design, and evaluation of computational tools that support and facilitate human activities

Dating software



# Winter courses

- Evaluation for CS9639b & CS9521b will be decided later on