

Visual Analytics Certificate

A six-week (3 CEUs) online course focused on understanding and creating data visualizations that translate complex data into actionable insights.

Course Topics

Each week the course combines data visualization theory with practical hands-on material and case studies.

Week 1 *Data-Driven Decision Making, Visual Analytics Framework, Workflow Design*

Week 2 *“When”: Temporal Data Analysis and Visualization*

Week 3 *“Where”: Geospatial Data Analysis and Visualization*

Week 4 *“What”: Topical Data Analysis and Visualization*

Week 5 *“With Whom”: Network Analysis and Visualization*

Week 6 *Future Developments, Value Creation via Data-Driven Decision Making*

Next Offered:
September 7–October 18, 2020

For More Information Contact:
CNS Team
cnsctr@indiana.edu

Students will learn...

- to discuss data and visualization using a common language
- to evaluate data and visualizations, and communicate insights across the company
- to apply visualization theories and best practice when using industry standard tools like Tableau and D3
- to implement a proven user-centered visualization design process

Case Studies: Solving Real-World Challenges

Students apply new knowledge and skills in projects that require identifying user needs and priorities; selecting the best data, algorithms, and workflows for temporal, geospatial, topical, and network case studies; communicating actionable insights using standard terminology; and gaining efficiencies for delivering high-quality results on time and on budget.



Monitor S&T
Developments



Manage
Communication Flows



Optimize
Traffic Flows



Manage
Customer Feedback



Improve Network
Resilience



Develop
Workforce

Related Books

The following books are used extensively in the course. Discover these highly regarded, award-winning books at your favorite bookstore.



*Atlas of Knowledge:
Anyone Can Map*

ISBN 0262028816



*Atlas of Science:
Visualizing What
We Know*

ISBN 0262014459



*Visual Insights:
Making Sense of
Big Data*

ISBN 0262526190

Instructors

Learn from instructors with diverse backgrounds who are experienced researchers and educators deeply committed to providing industry leading instruction and support.



Katy Börner

Instructor

Victor H. Yngve Distinguished Professor of Engineering and Information Science at the School of Informatics, Computing, and Engineering. Founding Director of the Cyberinfrastructure for Network Science Center (<http://cns.iu.edu>) at Indiana University.

- Research focus on development of data analysis and visualization techniques for information access, understanding, and management.
- Cyberinfrastructures development for large-scale scientific collaboration and computation.



Michael Ginda

Assistant Instructor

Data analyst and research assistant with the Cyberinfrastructure for Network Science Center. He holds a Master's degree in Library Science from Indiana University.

- Research focus on knowledge representation and organization, metadata, and information networks.
- Lead instructional designer.



Andreas Bueckle

Assistant Instructor

PhD Candidate in Information Science at Indiana University focused on information visualization with a background in digital media.

- Research focus on information visualization, specifically in virtual and augmented reality.
- Videography and photography.

Support Team



Elizabeth Record
Associate Director



Bruce Herr II
Senior System
Architect / PM



Leonard Cross
Senior Interaction
Designer