

## Workshop

### Data Storytelling & Visualization

#### Organizational details

|                              |                                                                                                                                    |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Instructor:                  | Dr Tobias Keller                                                                                                                   |
| Date:                        | February 18 & 19, 9.00 am - 3.00 pm respectively, February 20, 9.00 am - 1.00 pm, February 24 - 27, 9.00 am - 3.00 pm respectively |
| Location:                    | Room 001, Licher Str. 68, 35394 Gießen                                                                                             |
| ECTS:                        | 4                                                                                                                                  |
| Max. number of participants: | 12                                                                                                                                 |

#### Objectives

Effective data storytelling transforms analysis into understanding. In today's research and business environments, valuable insights are often lost because analysts focus on numbers rather than the stories those numbers can tell. This course empowers participants to craft clear, engaging, and persuasive data stories that connect evidence with meaning. Drawing on principles from visual perception, design, and narrative structure, the course provides a foundation for transforming analytical results into compelling messages. Participants will explore best practices through real-world examples, gain hands-on experience with professional data analysis and visualization tools, and apply their skills in a group project that emphasizes communication, clarity, and storytelling impact.

#### Content & Methods

The course consists of lectures to build the theoretical background as well as hands-on tutorials and exercises using a professional visualization software, Tableau. Participants will learn by examples and exercises from the instructor's experience in research and practice.

Hands-on tutorials and exercises will make up about 60 per cent of the course time. Participants will complete those using their own computers. Please see the preparation requirements below for a list of software programmes that need to be installed to that end. The exercises will be based on exemplary datasets that will be provided to the participants before the course.

#### Target group & Course Language

##### Target group:

Doctoral candidates, postdoctoral researchers, and faculty members in empirical or data-driven fields who need to communicate research findings clearly. The workshop also suits those pursuing careers in data science or consulting, where effective data storytelling and visualization are key.

### **Participation requirements:**

Please make sure you bring your own computer and ensure internet access throughout the course.

Please install the software Tableau (in particular, “Tableau Desktop Public Edition”) before the course. As a student (or teacher) you can apply for a free license here:

<https://www.tableau.com/community/academic>

### **Course language:**

English (German, if only German participants)

### **Requirements for ECTS credits**

To gain the ECTS, participants have to actively participate during the workshop and complete the homework assignment between February 20 and February 24.

### **About the instructor**

Dr Tobias Keller has been working as data scientist at ZERO.ONE.DATA, the big data startup of Deutsche Bahn AG since 2016. He consults on and applies machine learning and statistics for artificial intelligence systems in a big data environment. Furthermore, he teaches data science at Deutsche Bahn, in the doctoral education programmes at Justus Liebig University Giessen, and in the doctoral programme and master programme at WHU – Otto Beisheim School of Management. His research interests include machine learning and artificial intelligence, finance and accounting, strategic management.

### **Registration**

By February 8, 2025 via e-mail at [info@ggs.uni-giessen.de](mailto:info@ggs.uni-giessen.de).