

## Humanwissenschaftliche Fakultät

### Workshop: „Introduction to Python“ (beginners)

Dr. Arnim Bleier, Indira Sen, Kenan Erdogan

1-2 October 2019, 9:30 am to 5:30 pm

The workshop provides an introduction to the basics of using the Python programming language for PhD students who want to use Python in their research for tasks in the field of data science.

The workshop is connected to the workshop: “Introduction to Data Science with Python” which will take place October 14-16, and addresses itself to two groups of participants:

- 1) Those who are interested in the “Data Science” workshop but are not familiar enough with basic Python terms and applications or programming in Python to have a better starting point and to be able to follow Data Science workshop continuously. Therefore, the modules of this introductory workshop will be adjusted by the instructors to the requirements of Data Science workshop. For those who are inexperienced with Python or beginners, we strongly recommend to also attend the introductory workshop in order to have a better starting point for participating in the Data Science Workshop.
- 2) Those who are not sure if they would like to attend the Data Science workshop but who wish to gain a first insight into the essential elements of Python programming language.

Participants should be willing to study algorithmic approaches on abstract and applied levels. Some previous knowledge of any programming language (like R, C, C++, C#, Java, Syntax-Code in SPSS or Stata) is very advantageous to follow the coursework.

There is no mandatory preliminary preparation needed for this workshop. However, there will be some optional preliminary materials provided for those who would like to familiarize themselves with elementary programming concepts and the Jupyter environment, and it is highly recommended that participants go through the prep material before the start of the course.

The workshop will include the following modules:

- Introduction to the Python Data Science Stack and Jupyter Notebooks
- Introduction to Python & Basic Concepts
- Data Exploration and Preprocessing with Pandas

**Date:**

1-2 October 2019, 9:30 am to 5:30 pm

**Venue:**

Regional Computing Centre of the University of Cologne (RRZK)  
Course Room 3 (Basement, -1.02)

Building 133  
Weyertal 121  
50931 Cologne  
Interactive map: <http://lageplan.uni-koeln.de/#!133>

**Registration:**

Participation is limited to 15 persons.

Therefore, we would like to ask you to register via e-mail to [Graduiertenschule-HF@uni-koeln.de](mailto:Graduiertenschule-HF@uni-koeln.de) by **Friday, 20 September 2019**.

Those who have already taken part in the survey of interests during the lecture period in summer semester 2019 will be given priority in the placement process.

**Lecturers:**

Dr. Arnim Bleier is a postdoctoral researcher in the Department Computational Social Science at GESIS. His research interests are in the field of Natural Language Processing and Computational Social Science. In collaboration with social scientists, he develops Bayesian models for the content, structure and dynamics of social phenomena.

Indira Sen is a doctoral candidate at the Computational Social Science Department at GESIS. Her interest lies in understanding biases in inferential studies from digital traces, with a focus on natural language processing. She has experience working with large, unstructured data for social science research.

Kenan Erdogan is a software engineer with a background in Scientific Computing. Currently he is the lead developer at GESIS Notebooks project and among others he is a contributor to JupyterHub repositories. Before joining the GESIS Notebooks team he worked on the WikiWho project, making large online collaboration networks available for Social Science research.