UNIVERSITÄT
BERN

Vizerektorat Entwicklung

Introduction to data analysis and visualization using Python

Content	You will learn the basics about Python programming and descriptive statistics. Using Python you will be able to analyze and visualize data sets. We will work through the process of creating a program for data analysis and visualization step by step and introduce theory and do hands-on exercises as we go. The goal is not so much to get a deep understanding about Python programming, but to introduce programming as a tool to understand and present large data sets. In particular, you are encouraged to work with your own data. The statistical analysis will include simple descriptive measures, such as mean, maximum and minimum values, but also simple techniques to describe distributions and correlations. You will have to work on Python programming and statistical tutorials in between the course sessions.
Learning Objectives	After the workshop you can understand, analyze and visualize your own data sets. This includes plotting your data set and computing some statistical measures. But most importantly: You know where to start and how to deepen and broaden your programming skills from there on.
Individual Feedback	The participant will receive personal support by the trainer during the course.
Trainer:	Niclas Scheuing, M.Sc. Computer Science ETHZ, Lecturer University of Bern
Target Group:	PhD students and postdocs of all fields of research
Nr of Participants	17
Requirements	Python installed
Preparation task	Tbd, estimated workload 2-3h
Homework	Between each session homework of 2-3h workload will be assigned.
Dates	Oct 7, 14 & 21, Nov 4 & 11, 2022 2:15 p.m. -5:00 p.m.
Location	Oct 7, 14 & 21: Hochschulstrasse 4, Main Building, room 117, Nov 4 & 11: Schanzeneckstrasse 1, UniS, room A015
ECTS	1 recommended (15 h in class, 10-15 h preparation and homework)

Vice-Rectorate Development

Transferable Skills

Hochschulstrasse 6

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