Python Tutorial & Home Assignment 1

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gesis

Team

- Claudia Wagner

- Philipp Singer

- Florian Lemmerich (Newsgroup)

Who am I?

- Researcher at GESIS
- Computational Social Science department
- Data Science Team
- Research: Modeling aspects of sequential data on the Web

What happens in our department?

- Political communication on Twitter
- Nature and evolution of online food preferences
- Modeling and understanding sequential data
- Understanding collective editing behavior on Wikipedia
- Network science

Logistics

- Two home assignments
- Skewed points (~1/3 assignment 1)
- You need >=51% of total points
- You need to be able to explain and present your solution in class
- Submit your solutions as ipython notebooks via e-mail (Claudia and Philipp) (details in assignments)

Deadlines (may slightly change)

- 22.04. Handout Assignment 1
- 20.05. Handout Assignment 2
- 01.06. Deadline Assignment 1
- 03.06. Discussion Assignment 1
- 20.07. Deadline Assignment 2
- 22.07. Discussion Assignment 2

Newsgroup

- compsosci @ webnews.uni-koblenz.de
- Check it regularly!!!
- Help each other (without posting solutions)!
- You can get up to 4 extra points (2 for each assignment) when answering questions of your colleagues and/or providing useful, additional materials that will help you colleagues to better understand the topics of the course.

Topics of assignments

- Assignment 1: social network acquisition, representation and analysis
- Assignment 2: social network analysis, dynamics and evolution

Questions?

AMA

Python

- Why?
  - very readable
  - easy to learn
  - hard to master
  - large user community
  - many libraries
  - slower than C, but easy to integrate C, Fortran etc.

Installing Python

- Included in many distributions of Linux and OSX
- Python 2.7.X
- Ipython + Ipython Notebooks
- pip
  - allows to easily install libraries
  - e.g., pip install ipython
- IDEs
  - anything
  - PyCharm (https://www.jetbrains.com/pycharm/)

Invoking Python

- Interactive mode: Open a console and run python
- Ipython
- Ipython notebook
- Executing files: python file.py