Lecturers: Christoph Derndorfer and Lukas F. Lang

# Project #5: Analyze contributors and funders of FLOSS projects

**Idea:** Use, create, or extend open-source tools to understand who contributes and funds FLOSS projects. This could be done, for example, by analysing profiles of contributors to projects on GitHub using its API or by analysing mailing list archives (see e.g. markmail). The goal is to create statistics and visualize participation data, possibly in an interactive way.

#### Goals:

- Create tools to produce reliable stats about FLOSS participation.
- Learn about data analysis and visualization .

**Difficulty:** Easy-Medium

Subjects: open software, open data

## **Deliverables:**

- GitHub repository with source code.
- Documentation and visualisation of results (e.g. as PDF or Github page).

# Requirements and costs:

- Hardware, software, etc.
- Basic programming and data science skills

## Milestones:

- 1. Investigate which open source tools already exist and check their limitations.
- 2. Set up tools, access & analyze data
- 3. Create statistics and visualizations

#### **Estimation:**

#### Bonus:

Live demo page that allows to analyse projects (see e.g. GitHub Visualizer)

## References:

- Analysis of of public profiles via GitHub REST API (<a href="https://twitter.com/mjasay/status/960563592683667456">https://twitter.com/mjasay/status/960563592683667456</a>)
- Generating statistics from git repositories (<a href="https://stackoverflow.com/questions/1828874/generating-statistics-from-git-repository">https://stackoverflow.com/questions/1828874/generating-statistics-from-git-repository</a>)

This work is licensed under a Creative Commons <u>Attribution-ShareAlike 4.0</u> International License.