

## **Course Certificate**

Leena Huiku (Aalto University) participated on our course Introduction to Open Data Science, autumn 2018, earning 5 ECTS credits with a grade of 5 (excellent) on the typical assessment scale 0-5 used in the University of Helsinki.

The course is primarily targeted to Doctoral students of the (Computational) Social Sciences and (Digital) Humanities. Its name refers to 1) Open Data, 2) Open Science, and 3) Data Science.

The outline of the course was as follows:

- 1. Tools and methods for open and reproducible research R, RStudio, Rmarkdown, GitHub
- 2. Regression and model validation
- 3. Logistic regression
- Clustering and classification
   Discriminant analysis (DA)
   K-means clustering (KMC)
- 5. **Dimensionality reduction techniques**Principal component analysis (PCA)
  Multiple Correspondence analysis (MCA)
- Analysis of longitudinal data
   Graphical Displays and Summary Measures
   Linear Mixed Effects Models

The course ran for seven weeks consisting of a two hours' weekly workshop that supported the students' independent work. Weekly deadlines were strict. **Moodlerooms**<sup>TM</sup> mobile-ready platform (<a href="http://mooc.helsinki.fi">http://mooc.helsinki.fi</a>) together with **GitHub** was used for sharing the materials and reports as well as for the communication between the participants and teachers. For further details, see: <a href="https://courses.helsinki.fi/en/hymy-909/125158217">https://courses.helsinki.fi/en/hymy-909/125158217</a>

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