# Essentials of Data Science

Essentials of Data Science (EDS) training is designed to bring PhD level researchers up to speed in the modern field of Data Science. The curriculum is formed based on the tools and practices currently in use in data driven businesses and industry. It is meant to cover a wide spectrum of data science sufficient to start producing meaningful results. Theory and practice are interconnected to enhance hands-on experience on real-life data sets. The knowledge will help researchers to move their project and/or entrepreneurial interests forward to areas where other methods are cumbersome. At the same time, it prepares the participants for transition to industry should they choose a career outside Academia. References to common industry practices will be given and invited guests from fields such as finance, consulting and start-ups will give insights to common practices.

#### **Format**

- Small group allowing to organize learning of material through practice
- We are inviting to apply PhD students, Postdocs, and other recent PhD graduates
- Now you can apply for Spring 2017 batch (May)
- Format: 5 consecutive Saturdays or Sundays (specific dates TBA)
- Training location: Princeton University Campus

## Throughout the course the participants work in:

#### **Data Mining**

- Extracting knowledge from structured and unstructured data
- · Text analytics
- Image processing

## Plotting, Presenting, Collaboration, and Reporting

- Elegant graphs, Interactive data exploration
- Dashboards, Dynamically generated reports and presentations
- Git and GitHub
- Deployment of the analytics findings as a web application (R Shiny)

### Machine learning, consideration from Industrial point of view

- Regression, Classification, Clustering, Recommendation systems
- Scalable statistical learning
- Typical problems you would face in industry, and how to approach them
- Presenting results in industry settings

## Cost and more information:

- This program is free for participants
- Information and an application form are available on the program's website www.ket-labs.com/eds/
- EDS training is supported by Pivigo, offering Europe's largest data science training program S2DS