

[Editorial]

# Machine Learning: Research and Teaching

GEFEI ZHANG

Hochschule für Technik und Wirtschaft Berlin

gefei.zhang@htw-berlin.de

Data Science and Machine Learning have undoubtedly produced some of the most exciting breakthroughs in Computer Science research and application. Success stories in autonomous driving, robotics, computer vision and natural language processing have drawn a lot of attention to this field and are rapidly changing our society, just to name a few examples.

In the era of data science, the academia is not only facing the challenge of developing novel, powerful methods for more and more emerging applications, but also that of improving data science teaching and preparing the next generation of scientists and engineers to discover more patterns in the data of our world. In particular, we are seeking

- ways to improving the motivation of data science students,
- methods of scalable and efficient teaching data science contents,
- data science curricula and teaching materials,
- ideas of deriving case studies for teaching from data science research.

The Berlin Journal of Data Science aims to providing academics and practitioners with a platform to exchange their ideas and experiences in data science teaching as well as disseminating results in data science research. This inaugural volume includes six papers by researchers from German and Dutch universities. Five of the papers are about teaching, and one

of them gives an introduction to Bayesian deep learning.

## I. CONTENT OF THIS ISSUE

This volume contains the following papers:

- Felix Gers, Felix Biessmann. Deep Learning im Inverted Classroom Szenario—Ein Erfahrungsbericht.
- Matthias Lutz, Patrick Palsbröcker, Carsten Gips, Matthias König. Machine Learning Campus Minden: using Cloud-Services to teach Data Science and Deep Learning, an Experience Report.
- M. van Keulen, C. Seifert, M. Poel, C.G.M. Groothuis-Oudshoorn. Scalable Interdisciplinary Data Science Teaching at the University of Twente.
- Christin Schmidt. Addressing data acumen with an introduction to data science.
- Manuel Schneider, Norbert Greifzu, Christian Walther, Andreas Wenzel. Übertragung von anwendungsnahen Problemstellungen des Maschinellen Lernens aus der Forschung in die Lehre.
- Christian Herta. Introduction into Bayesian (Deep) Learning.