Deep Learning and Economical Applications

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Abstract. Facing the digitaization caused through disruptive technologies, the filed of data science is broadened, especially through the use of deep learning techniques. Not only can those deep networks help to successfully solve regression and classification problems but also can generate content like game theoretic decisions and are therefore able to help simulate game theory approaches. However this development requires the a data scientist to have a more in-depth knowledge as well as a substantial technical background. We show how the development of economic data scientist has changed and propose a set of skills generated from multiple empirical sources like expert interviews, web mining as well as surveys in a meta analysis. We also distinguish the concept of big data from the concept of data science.

Keywords: Economics, Data Science, Big Data, Deep Learning