BIG DATA ANALYTICS
KNOWLEDGE EXCHANGE PLATFORM M1
Fin – Tech HO2020 project – AI, Market Risk and Robo Advisory
Note: This program is subject to changes.

Dates: 10 – 11 February 2020, Frankfurt
Draft Agenda: Advanced Analytics Methods
Day 1

8.30 – 9.00	**Registration**
9.00 – 9.30	Welcome by Bundesbank | Markus Grimm Opening and Introduction to FinTech-HO2020 Project | Wolfgang Karl Härdle & Rui Ren, HU Berlin
9.30 – 10.30	**Session 1** Basic Concepts | Wolfgang Karl Härdle Data management, digital economy, decision analytics, AI and its future
10.30 – 11.00	**Coffee break**
11.00 – 12.30	**Session 2** Network analysis | Wolfgang Karl Härdle & Jochen Papenbrock
12.30 – 13.30	**Lunch break**
13.30 – 15.00	**Session 3** Financial Risk Meter (FRM) | Wolfgang Karl Härdle & Rui Ren Methodology, examples in American, European and Asian stock market
15.00 – 15.30	**Coffee break**
15.30 – 17.00	**Session 4** AI Use Cases | Wolfgang Karl Härdle & Rui Ren

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8.30 – 9.00	Getting started – technical set-up
9.00 – 10.30	**Session 5** Deep Learning Glossary in Layman Language | Wolfgang Karl Härdle & Stefan Lessmann Perceptron, cross-entropy, gradient descent, back propagation, Boltzman machine, auto-encoder, RNN, CNN, GANs, IML, LIME, LSTM, … Multi-core computing, computing in the clouds.
10.30 – 11.00	**Coffee break**
11.00 – 12.30	**Session 6** Interpretable Machine Learning | Stefan Lessmann
12.30 – 13.30	**Lunch break**
13.30 – 15.00	**Session 7** eXplainable AI (XAI) in Regulated Financial Services | Jochen Papenbrock
15.00 – 15.30	**Coffee break**
15.30 – 17.00	**Session 8** Recent Developments in Reject Inference |Stefan Lessmann
17.00 – 17.15	**Evaluation and closing remarks**

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Somel examples are presented in R or Python. The Quantlets are available here:

http://www.quantlet.de/