

Title:

Financial Networks and related AI in Financial Services

Abstract:

Year 2017 has been a wake up call for the financial services industry with respect to AI. The industry begins to understand that AI is critical in their data-driven digitalisation process. Financial data sets are usually large, dynamic, high-dimensional and complex as they were generated in the context of complexity economics. There is a need for proper AI approaches to capture such complexity. Natural candidates are graph theory, network analysis and clustering. They reveal the dynamics, relationships, emerging properties and self-organising principles in complex data. These approaches can be combined with other AI methods like deep learning and they address supervised and unsupervised learning problems. Another feature of such approaches is visualisation and interaction. The representation of the learned structures like networks or clusters can be visualised and accessed on large computer screens. There is an interactive data science experience while capturing and understanding the main features, shapes and structures of complex financial data. In this talk we will give an overview of the methods and present some use cases in asset management and banking. The related software platform architectures will also be discussed.