

Graduate School of Information Science, University of Hyogo 19th International Research Seminar

ARTIFICIAL INTELLIGENCE IN FINANCE

Mon. 27 Oct. 2025 (13:00 ~ 14:00) JST

IN-PERSON/ONLINE SEMINAR

Artificial Intelligence (AI) is transforming the financial sector by enhancing efficiency, improving decision-making, and fostering greater financial inclusion. Financial institutions such as JPMorgan Chase, Goldman Sachs, and BlackRock increasingly deploy Al-driven solutions to optimize operations and client services. Notable applications include algorithmic trading, where machine learning models analyze large volumes of market data to execute trades at high speed and precision, and portfolio management, where robo-advisors such as Betterment and Wealthfront offer tailored investment strategies at scale. Beyond investment services, Al supports financial literacy initiatives by powering chatbots, personalized education tools, and adaptable applications that make financial knowledge more accessible to underserved communities. Similarly, Al-driven credit scoring and alternative data usage enhance financial inclusion, granting broader access to banking and lending for individuals traditionally excluded from the system. Despite its potential, Al adoption in finance also brings risks and challenges. Algorithmic opacity raises concerns about model explainability and accountability, particularly in high-stakes financial decision-making. Bias in training data can perpetuate systemic inequities, while overreliance on automated systems may amplify systemic risks during market volatility. Cybersecurity vulnerabilities and data privacy issues further complicate responsible implementation. Regulatory bodies, including the U.S. Securities and Exchange Commission (SEC) and the European Central Bank (ECB), actively explore frameworks to ensure Al applications remain transparent, ethical, and resilient. While Al is reshaping financial services by enabling innovation in trading, investment management, education, and inclusion, its successful integration depends on careful governance, risk management, and regulatory oversight to balance technological progress with financial stability and public trust.

Register here (free)

https://shorturl.at/df7db

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Guest Speaker



Irena Vodenska

Professor and Director, Finance
Program
Chair, Administrative Sciences
Department
Metropolitan College
Boston University, USA



Kobe Campus for Information Science, Computational Science Center Building, Large Lecture Hall (720), 7th Floor https://www.u-hyogo.ac.jp/about/access/

Professor Vodenska holds a Ph.D. in statistical finance and an MA in economics from Boston University, an MBA from Owen Graduate School of Management at Vanderbilt University, and a BS in management information systems (MIS) from the Faculty of Organizational Sciences at the University of Belgrade. She is also a Chartered Financial Analyst (CFA) charter holder. Dr. Vodenska's research focuses on sustainability in finance and macroeconomics. She conducts theoretical and interdisciplinary empirical quantitative approaches for modeling interdependences of financial networks including environmental considerations, given that climate change become an increasingly significant systemic risk factor for the global economy. Her research includes investigating the propagation disinformation via social networks such as Twitter and understanding the distortion 's effect on the public, governance, and policy. She studies the impact of media reporting on Environmental, Social and Governance (ESG) concerns on corporate sustainability and governance. She uses Al-powered tools, including natural language processing (NLP) and Large Language Models (LLMs), to text-mine and understand crucial ESG factors affecting company performance and risk, corporate reporting, and global economic trends, primarily related to social responsibility, governance. Prof. Vodenska has also developed a graduate program of study and research on artificial intelligence applications in finance at Boston University. In 2023, Dr. Vodenska won a National Science Foundation (NSF) research grant to explore Al-powered ESG solutions.

For more details:

https://www.bu.edu/met/profile/irena-vodenska/