S7 **2025 IEEE Symposium on CI for Financial Engineering and Economics (IEEE CiFer)**

18th March 2025

Session	Time	Room	#Papers	Title	Authors
short S7-A	12:00-13:00	Cosmos 1&2	5	Stock Prediction by Signal Decomposition-driven Multivariate Feature Extractor and Executor-based Mixture of Experts	Tsai, Cheng-En; Li, Shiou-Chi; Huang, Jen-Wei
				Dynamic Orthogonal Lower Dimensional Projections for Improving Hierarchical Risk Allocation and Out of Sample Portfolio Returns	Pergher, Kevin; Soldera, John; Scharcanski, Jacob
				Innovative Pattern Extraction and Synthetic High-Frequency Data Generation in European Carbon Emmision Markets Using GAN Networks	Hosseini, Seyed Ali; Niccolai, Alessandro; Grimaccia, Francesco
				A mean-field conventional asset penalizing game: a study of green premium	Zhao, Weicheng; Zhang, Jingguo
				The Superiority of Direct Neuro Volatility Forecasts Over GARCH and Machine Learning Forecasts for Financial Assets	Bowala Mudiyanselage, Sulalitha; Thavaneswaran, Aerambamoorthy; Moragammana Gedara, Avanthi; Dip Das, Joy; Thulasiram, Ruppa; Paseka, Alex

oral S7-A	15:30-16:30	Cosmos 3a	6	KANOP: A Data-Efficient Option Pricing Model using Kolmogorov-Arnold Networks	Handal, Rushikesh; Matoya, Kazuki; Wang, Yunzhuo; Hirano, Masanori
long S7-A	16:30-17:30	Cosmos 1&2	6	Decoding OTC Government Bond Market Liquidity: An ABM Model for Market Dynamics	Vidler, Alicia; Walsh, Toby
Session Chair: Ruppa Thulasiram				A Deep Ensemble Learning Approach for Imbalanced Data in Bankruptcy Prediction	Gnip, Peter; Drotar, Peter; Kanász, Róbert; Zoricak, Martin
				Deep Reinforcement Learning in Labor Market Simulations	Chen, Ruxin; Zhang, Zeqiang
				Identifying Aspect-Regimes for Enhanced ESG-Investing Through News Data	Billert, Fabian; Conrad, Stefan
				Non-Linear Data Representation with Machine Learning for Dynamic Covariance Based Financial Portfolio Optimization	Dip Das, Joy; Moragammana Gedara, Avanthi; Bowala Mudiyanselage, Sulalitha; Thulasiram, Ruppa; Thavaneswaran, Aerambamoorthy

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Session	Time	Room	#Papers	Title	Authors
oral S7-B	15:00-16:00	Cosmos 3d	5	Enhancing Recurrent Neural Networks For Stock Market Forecasts through PEC-W Framework	çalışkan, Büşra
long S7-B	16:00-17:00	Cosmos 1&2	5	Identifying Representation Bias in Large Language Models used in Financial Sentiment Analysis	Sabuncuoglu, Alpay; Maple, Carsten
Session Chair: Xinghong Fu				Enhancing Cryptocurrency Trading Strategies: A Deep Reinforcement Learning Approach Integrating Multi-Source LLM Sentiment Analysis	Du, Nanjiang; Zhao, Yida; Wang, jintao; Zhu, Yicheng; xie, siyu; Yang, Luyao; Tong, Yiru; Shengzhe, Xu; Zhang, Wangying; TANG, ZECHENG; Xu, Kai; Ren, Jianfeng ; Cui, Tianxiang
				Financial Fine-tuning a Large Time Series Model	Fu, Xinghong; Hirano, Masanori; Imajo, Kentaro
				Leveraging Large Language Models and Retrieval-Augmented Generation for Enhanced Multi-Asset Portfolio Construction	Hajaghaie, Ahmadreza; Thulasiram, Ruppa

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Session	Time	Room	#Papers	Title	Authors
short S7-B	10:00-11:00	Cosmos 1&2	4	Novel Financial Network Models using Neuro Correlations and Applications	Moragammana Gedara, Avanthi*; Thavaneswaran, Aerambamoorthy; Bowala Mudiyanselage, Sulalitha; Thulasiram, Ruppa; Dip Das, Joy; Paseka, Alex
				Enhancing Forecasting with a 2D Time Series Approach for Cohort-Based Data	Guttel, Yonathan*; Lieder, Nachi; Moradov, Orit; Greenstein-Messica, Asnat
				Simulating Illiquid Markets: Insights from Fractional Ownership Trading and Agent-based Models	Fluri, Lars; Yilmaz, Ege; Bieri, Denis; Ankenbrand, Thomas; Perucca, Aurelio
				Robust European Call Option Pricing via Linear Regression	Bitar, Ahmad

poster S7	10:00-11:00	Cosmos 1&2	2	Meta-learning for Cross-Sectional Return Prediction	Yicheng Wang; Sandro Lera
				Tensor train representations for Greeks of Fourier-based pricing of multi-asset options	Rihito Sakurai; Koichi Miyamoto; Tsuyoshi Okubo

LBP S7	10:00-11:00	Cosmos 1&2	2	Self-Learning Heterogeneous Knowledge Transfer Framework for Financial Risk Assessment	Zhaoqing Liu