**Workshops: Wednesday 2 November**

- **08:00** - **12:30**
  - Small Data, Big Opportunities: Making The Most Of AI Benchmarks for AI in Finance
  - Secure and Private AI Computing in Financial Services
  - Machine Learning for Environmental, Social and Governance (ESG) Investing
  - Natural Language Processing and Network Analysis in Financial Applications
  - AI in Africa for Sustainable Economic Development (fully virtual)
  - USAIF: User Safety in AI and Finance (fully virtual)

**Lunch Break**

- **13:00** - **17:00**
  - Graph and Knowledge Graphs in Finance
    - Explainable AI in Finance
    - Synthetic Data for AI in Finance
    - Women in AI and Finance
    - Machine Learning for Investor Modelling

**Sponsored Presentations**

**Main Conference: Thursday 3 November**

- **08:15** - **08:30**
  - Program Chair Welcome

- **08:30** - **09:00**
  - Keynote Talk: Xin Guo

- **09:00** - **10:30**
  - RE:SHAPE: Explaining Accounting Anomalies in Financial Statement Audits by enhancing Shapley Additive exPlanations
  - Mapping of Financial Services datasets using Human-in-the-Loop (Shubhi Ashrana, Rachit Maheshwari)
  - Addressing Extreme Market Responses Using Secure Aggregation (Sahar Mazloom, Antone Polychroniadou, Tucker Balch)

**Lunch Break**

- **11:00** - **12:30**
  - Offline Deep Reinforcement Learning for Dynamic Pricing of Consumer Credit (Raad Khatib, Ramon Colbro)
  - Risk-Aware Linear Bandits with Application in Smart Order Routing (Jingwei Ji, Renjuan Xu, Ruhao Zhu)
  - Synthetic Data Augmentation for Deep Reinforcement Learning in Financial Trading (Cunli Liu, Carmen Ventre, Maira Polukarov)

**Sponsored Presentation with Coffee**

- **12:00** - **13:00**
  - An Interpretable Deep Classifier for Counterfactual Generation (Wei Zhang, Brian Barr, John Paisley)
  - Understanding counterfactual generation using maximum mean discrepancy (Wei Zhang, Brian Barr, John Paisley)

**Lunch Break**

- **13:00** - **14:15**
  - Dark-Pool Smart Order Routing: a Combinatorial Multi-armed Bandit Approach (Marino Bernasconi, Stefano Martino, Eduardo Vittorio, Francesco Trovato, Marcello Restelli)
  - Deep Hedging: Continuous Reinforcement Learning for Hedging of General Portfolios across Multiple Risk Aversions (Philip Murray, Ben Wood, Hans Buehler, Magnus R Weise, Mikko S Pakkanenen)

**Sponsored Presentation with Coffee**

- **14:00** - **15:30**
  - Reinforcement Learning for Intra-and-Inter-Bank Borrowing and Lending Mean Field Control Game (Jinmin Lin, Andrea Angiuli, Nils Detering, Jean-Pierre Fouque, Mathieu Laurière)
  - Achieving Mean-Variance Efficiency by Continuous-Time Reinforcement Learning (Wei Huang, Yawei Jia, Xun Yu Zhou)
  - Cost-Efficient Reinforcement Learning for Optimal Trade Execution on Dynamic Market Environment (Di Chen, Yada Zhu, Miao Liu, Jianbo Li)

**Sponsored Presentation with Coffee**

- **15:00** - **16:30**
  - Adversarial Fraud Generation for Improved Detection (Arunothai Pandey, Akshayya Bhatnagar, Shri Markam, Deepak Bhalla)
  - Online Learning for Mixture of Multivariate Hawkes Processes (Mohsen Ghassemi, Niccolò Dalmasso, Vamsi K Potluri, Tucker Balch, Sameena Shah, Manuela Veloso)

**Conference Reception**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<td>08:15</td>
<td>Guided Self-Training based Semi-Supervised Learning for Fraud Detection</td>
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<tr>
<td>08:30</td>
<td>A Deep Learning Approach for Dynamic Stress Testing</td>
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<td>09:30</td>
<td>Keynote Talk: Sebastian Jaimungal</td>
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<td>10:30</td>
<td>Core Model Regression and Prediction with Regularization</td>
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<td>11:00</td>
<td>Monotonic Neural Additive Models: Pursuing Regulated Machine Learning Models for Credit Scoring</td>
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<tr>
<td>14:00</td>
<td>Theoretically Motivated Data Augmentation and Regularization for Portfolio Construction</td>
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<tr>
<td>15:00</td>
<td>Decentralization Analysis of Pooling Behavior in Cardano Proof of Stake</td>
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**Main Conference: Friday 4 November**

**Program Chair Welcome**

**Keynote Talk: Sebastian Jaimungal**

**Deep Learning for Systemic Risk Measures**

(Avani Kaur, Soumyadeep Ghosh, Janu Verma)

**Sequential Banking Products Recommendation and User Profiling in One Go**

(Georg Fasjidda, Davide Liu, Alexandre Boulenger)

**Core Model Regression and Prediction with Regularization**

(Dan Zhou, Ajin Uddin, Zuofeng Shang, Cheickna Sylla, Dantong Yu)

**Sponsored Presentation with Coffee**

**Lunch Break**

**Learning Mutual Fund Categorization using Natural Language Processing**

(Balazs Vanzourelis, Mate Toth, Dhruv Desai, Dhagasth Mehta, Stefano Pasquali)

**Can maker-taker fees prevent algorithmic cooperation in market making?**

(Bingyi Han)

**Graph and tensor-train recurrent neural networks for high-dimensional models of limit order books**

(Jacek Róz Vicens, Yao Lei Xu, Ricardo Silva, Daino P. Marchi)

**Differential Liquidity Provision in Uniswap v3 and Implications for Contract Design**

(Zhou Fan, Francisco Marmolejo-Cossio, Ben Altschuler, He Sun, Xintong Wang, David Parkes)

**Market Making with Scaled Beta Policies**

(Joseph Jerome, Gregory Palmer, Rahul Savani)

**Graph Making under Order Stacking Framework: A Deep Reinforcement Learning Approach**

(Guhyuk Chung, Munki Chung, Yongiae Lee, Min Chang Kim)

**Portfolio Selection: A Statistical Learning Approach**

(Yiming Peng, Vladimir Linetzel)

**Federated and Privacy-Preserving Learning of Accounting Data in Financial Statement Audits**

(Marco Schreier, Timur Sattarov, Damir Bortot)

**Sponsored Presentation with Coffee**

**15:30**

**Theoretically Motivated Data Augmentation and Regularization for Portfolio Construction**

(Lu Ziye, Kendaro Minami, Kendaro Inago)

**Objective Driven Portfolio Construction Using Reinforcement Learning**

(Ruixue Wang, Jithin Pradeep, Zhihun Chen)

**Strategic Asset Allocation with Liquid Alternatives**

(Eric Luxenberg, Stephen Boyd)

**Collusion Resistant Federated Learning with Obvious Distributed Differential Privacy**

(David Byrd, Vaskiathan Mugunthan, antoni polychroniadou, Tucker Balch)

**Equitable Marketplace Mechanism Design**

(Khamae Dwarakanath, Svitlana Vyetrenko, Tucker Balch)

**Incentivising Market Making in Financial Market**

(Ai Qi, Camine Ventre)