<u>CIFER 2024 Conference - CALL FOR EXTENDED ABSTRACTS or FULL-LENGTH PAPERS FOR</u> DISCUSSION TRACK

DATE: Tuesday & Wednesday, October 22 – 23, 2024

TIME: 9-5pm

LOCATION: Stevens Institute of Technology in Hoboken, New Jersey

WEBSITE: https://www.stevens.edu/page-right-nav/cifer-conference-2024

BROCHURE: CIFEr 2024 Conference Flyer

REGISTRATION: https://easychair.org/conferences/?conf=cifer2024

DISCUSSION & EXTENDED ABSTRACT SUBMISSION SITE:

https://easychair.org/conferences/?conf=cifer2024

Important dates (anywhere on Earth time zone):

Regular Paper Submission: CLOSED

Notification to Authors (Regular Papers): June 30, 2024

Discussion Track Submission: July 15, 2024

• Extended Abstract Submission: July 15, 2024

Notification to Authors (Discussion/Extended Track): August 15, 2024

• Early Registration: open until July 15, 2024

• Regular Registration: July 15 – October 21, 2024

Discussion/Extended Abstract Registration: flat fee regardless of date

• Main Conference: Oct. 22-23, 2024

EXTENDED ABSTRACTS:

Extended abstracts must be maximum of 2 pages length, including figures, tables, and references. Selected extended abstracts will be invited to give a 20-minute talk at the conference in extended abstract sessions. The authors will need to register for the conference for giving their talk. Extended abstracts will not be included in the conference proceedings.

FULL-LENGTH PAPER WITH DISCUSSION:

Full-length papers submitted for the conference's discussion track must be maximum of 50 pages length, including figures, tables, and references. Selected full-length papers for the discussion track will be invited to give a 20-minute talk at the conference, followed by an assigned discussant discussing the paper for 10 minutes. The authors of full-length papers presented in the discussion track will need to register for the conference. Discussion track papers will not be included in the conference proceedings.

Conference Information

Keynote Speakers

- Andrei Kirilenko, Professor of Finance, Director of the Cambridge Center for Finance, Technology & Regulation at the University of Cambridge
- Agostino Capponi, Professor of Industrial Engineering and Operations Research, Director of the Center for Digital Finance and Technologies at Columbia University
- Shanker Ramamurthy, Managing Partner Global Banking & Financial Markets, IBM

More Speakers TBA

Program Chairs

- Steve Yang (Stevens Institute of Technology) Co-Chair of the Organizing Committee
- Aparna Gupta (Rensselaer Polytechnic Institute) Co-Chair of the Organizing Committee
- Zachary Feinstein (Stevens Institute of Technology) Chair of the Technical Committee

Organizing Institutions

Stevens Institute of Technology

The Center for Research toward Advancing Financial Technologies (CRAFT)

Conference Objective

Since 1995, the IEEE Symposium on Computational Intelligence for Financial Engineering and Economics (CIFEr) has been a leading forum for research and applications of Computational Intelligence in Business, Finance and Economics. The financial services industry is presently undergoing considerable change due to the development of new technologically focused products and services. The understanding of these innovations requires multidisciplinary approaches from the perspective of industry, societal and government policies. The upcoming CIFEr 2024 will be co-hosted by the Center for Research toward Advancing Financial Technologies (CRAFT) funded by the U.S. National Science Foundation in the New York Metropolitan area.

The event brings together a global community of researchers and practitioners with a particular emphasis on fostering cross disciplinary collaboration. Technical exchanges will encompass keynote talks, research presentations and tutorials. Networking will be facilitated by social functions and activities at the venue.

Topics of Interest

1. Computational Intelligence Models and Applications:

Machine Learning in Finance
Large Language Model Applications in Finance
Big Data Finance and Economics
Al and Deep Learning Models in Finance
Probabilistic Modeling/Inference

Fuzzy Sets, Rough Sets, & Granular Computing

Intelligent Trading Agents

Trading Room Simulation

Time Series Analysis

Non-linear Dynamics

Financial Analytics

Financial Data Mining

Evolutionary Computation

Digital Financial Reporting

Semantic Web and Linked Data

Multi-objective Optimization

Agent Based Modelling and Simulation

Co-evolutionary Techniques

Artificial Life

Evolutionary Game Theory

Particle Swarm Optimization

Cognitive Systems

Modelling and Problem Representations

Operators

2. Application Areas: Finance:

Asset allocation strategies

Trading systems

Algorithmic trading

Trade execution systems

Risk management.

Pricing of structured securities

Behavioral finance

Evolutionary finance

Portfolio optimization

Arbitrage

Exotic options

Cryptocurrencies

Blockchain and applications

Front and back-office operations

Financial prediction and forecasting

3. Application Areas: Economics:

Agent based computational economics
Market modelling
Energy and electricity markets
Blockchain economics

4. Application Areas: Business:

Business analytics
Recommender systems
E-commerce
Advertising and marketing
Crowds and market models
Demand forecasting
Distribution and supply chain

5. Fintech Areas:

Applications of machine learning and artificial intelligence financial decision making.

Cryptocurrency and Blockchain

Smart contracts utilization in financial services

Decentralized exchanges

Open banking

Quantum computing and communications in finance

Insurtech innovations to simplify and streamline the insurance industry

Regtech innovations for compliance and fraud detection

Robo-advising

New developments in Fintech ethics, legal, and regulatory topics

Paper Awards

The Best Paper Award, carrying a prize of \$750, is open to all papers presented.

The Best Doctoral Paper Award, carrying a prize of \$500, is open to all thesis papers presented. Papers received after April 30, 2024, will not be considered for the awards.

Registration Fee

The early registration fee is \$800 by July 15, 2024. After July 15, 2024, registration fee will increase to \$900. All Discussion and Extended Abstract track attendees will pay a flat fee of \$600 regardless of the date. IEEE members will receive \$100 discount on all registration fees. For doctoral students, a discount of 40% applies to the registration fees. Registered participants may attend all conference functions free of charge, including tour, reception, gala dinner, lunches, and coffee breaks.

Venue

Stevens Institute of Technology University Center Complex 1 Castle Point Terrace Hoboken, New Jersey 07030

Organizing Committee

- Steve Yang (Stevens Institute of Technology) Co-Chair of the Organizing Committee
- Aparna Gupta (Rensselaer Polytechnic Institute) Co-Chair
- Agostino Caponi (Columbia University, US)
- Ruppa Thulasiram (University of Manitoba, Canada)

- Maggie Chen (Cardiff University, UK)
- Uzay Kaymak (Eindhoven University of Technology, Netherland)
- Ruixun Zhang (Peking University, China)
- Dietmar Maringer (University of Basel, Switzerland)
- Jing-bo Yang (University of Manchester, UK)
- Tae-Wan Kim (Seoul National University, South Korea)

Technical Committee

- Zach Feinstein (Stevens) Chair
- Roy S. Freedman (NYU)
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- Yi Cao (Edinburgh)
- Majeed Simaan (Stevens)
- David Quintana (University Carlos II de Madrid)
- Mohammed Zaki (RPI)
- Pablo Campos de Carvalho (BIS)
- Kevin Mo (Invesco)
- Robert Golan (DBMind)
- Anqi Liu (Cardiff)
- Zhenyu Cui (Stevens)
- Zigan Wang (Tsinghua University, China)

Further Information

The CIFEr website will publish information regarding the conference, accommodations, featured speakers, travel arrangements, fees, and other activities as needed.

CRAFT Student Travel Grants (\$500) are available for eligible Ph.D. students to attend CIFEr 2024 conference. The details will be announced soon on the conference website.

CIFEr 2024 will take place at Stevens Institute of Technology in Hoboken, NJ. Stevens is named for the distinguished family known as "America's First Family of Inventors." Founded in 1870, it is one of the oldest technological universities in the United States and was the first college in America solely dedicated to mechanical engineering. The 55-acre campus encompasses Castle Point, the highest point in Hoboken, a campus green and 43 academic, student and administrative buildings.

Hoboken can be reached by air, train, and road easily from Major cities in Northeast USA including New York City. Perched on the Hudson River in the Hudson County of New Jersey, Hoboken is a small city located right across from Lower Manhattan. It is 30 minutes' drive away from Newark Liberty International Airport. Newark Airport is a bustling hub with a diverse lineup of more than 50 airlines, providing an extensive network of flights to destinations across North America, South America, Europe, Asia, and Africa. Hoboken offers postcard perfect stunning views of the Hudson River and skyscraping buildings of Manhattan. The city also has a

rich history and vibrant culture that can be seen in several fantastic museums, art galleries, festivals, and other unique attractions.

You will also find delectable food in the delightful eateries across the town influenced by various communities. The city's nightlife is also very much worth experiencing; with several unique bars and clubs, you are guaranteed to have a great time. With breathtakingly stunning views, scrumptious food, waterfront bars, and all the other fantastic attractions, Hoboken will win over your heart.