



INDUSTRY ADVISORY BOARD MEETING OCTOBER 24 - 25











CRAFT is the first I/UCRC focusing on Fintech research and innovation to bring together academic and industry participants, as well as representatives from all levels of government, and support the agenda of advanced research projects related to the Fintech challenges of the financial services industry.

The Center for Research toward Advancing Financial Technologies (CRAFT) is housed in the Stevens School of Business. It is the first fintech-focused Industry University Cooperative Research center funded by NSF. Working together, the center's academic and industry partners collaboratively create innovative solutions such as decentralized finance, Al-enabled finance, quantum finance and solutions to climate-related impacts on investment, while also helping secure our financial data, create and test more equitable trading platforms, inform financial regulations, and support improved market simulation and stress-testing tools that ensure financial system stability for all.

CRAFT Industry Advisory Board meetings are bi-annual and take place on a Spring/Fall cycle. Fintech research project proposals will be presented at each meeting during Day 1 and then discussed, voted on, and selected by the Industry Advisory Board on Day 2 during a closed session. During the closed session, current CRAFT projects will also present their research findings.

To become a CRAFT Industry Partner, or to learn more about the Center, please contact CRAFT@Stevens.edu.











Dr. Steve Yang | CRAFT Director, Associate Professor Stevens Institute of Technology, School of Business

Dr. Steve Yang is an Associate Professor of the School of Business at Stevens Institute of Technology. He holds a Ph.D. in Systems and Information Engineering from University of Virginia with concentration on Financial Engineering. Dr. Steve Yang is currently the Director of the Center for Research toward Advancing Financial Technologies established by Stevens Institute of Technology and Rensselaer Polytechnic Institute, co-sponsored by the National Science Foundation (NSF). Dr. Steve Yang's research has been focused on understanding markets' irrationality and impact on trading, portfolio, risk management, and systemic risk using decision science tools such as Markov decision processes, reinforcement learning and other artificial intelligence (AI) methods. His research has been funded by NSF, DoD, IRRC, IAAER, CFTC, Accenture, KPMG, SWIFT, etc.



Mohammed Zaki | CRAFT Site Director, Professor and Department Head Rensselaer Polytechnic Institute

Mohammed J. Zaki is a Professor and Department Head of Computer Science at RPI. He received his Ph.D. degree in computer science from the University of Rochester in 1998. His research interests focus novel data mining and machine learning techniques, particularly for learning from graph structured and textual data, with applications in bioinformatics, personal health and financial analytics. He has around 300 publications (and 6 patents), including the Data Mining and Machine Learning textbook. He is the founding co-chair for the BIOKDD series of workshops. He is currently an associate editor for Data Mining and Knowledge Discovery, and he has also served as Area Editor for Statistical Analysis and Data Mining, and as Associate Editor for ACM Transactions on Knowledge Discovery from Data, and Social Networks and Mining.



Dr. George Calhoun | CRAFT Managing Director, Program Director, Quantitative Finance, Professor, Stevens Institute of Technology, School of Business

Dr. George Calhoun is a Co-Founder of InterDigital Communications Corporation (NASDAQ: IDCC), which currently has a market cap of \$1.5 billion. He was vice chairman of Geotek Communications, and was chairman of the company's joint venture with a branch of the Government of Israel. Dr. Calhoun was the chairman and CEO of Illinois Superconductor Corporation (AMEX: ISO), a public company focused on the application of high-temperature superconducting materials and advanced signal processing techniques.



SPEAKERS



GJ de Vreede | Dean of School of Business Stevens Institute of Technology

GJ de Vreede is Dean of the School of Business at Stevens Institute of Technology. Previously he served as Associate Dean and Interim Dean at the Muma College of Business of the University of South Florida and as Director of the Center for Collaboration Science at the University of Nebraska at Omaha. He received his PhD in Information Systems from Delft University of Technology, the Netherlands. He has been a visiting professor at Renmin University (China), the University of International Business & Economics (China), the University of Arizona, and the University of Pretoria (South Africa). His research focuses on Al in teams, crowdsourcing, and Collaboration Engineering.



Liad Wagman | Dean of Lally School of Management Rensselaer Polytechnic Institute

Liad Wagman is Dean at Rensselaer Polytechnic Institute's Lally School of Management, Professor of Economics, and Academic Affiliate at the International Center for Law and Economics. He was previously the Dean and John and Mae Calamos Endowed Chair at Illinois Institute of Technology's Stuart School of Business. Wagman served as Senior Economic and Technology Advisor at the U.S. Federal Trade Commission, provided expert testimony in key privacy and antitrust litigations, and worked at Northwestern, Duke, and Stanford universities. His research received awards and covers technology, entrepreneurship, competition, and policy.



Andrei Kirilenko | Professor of Finance, Judge Business School, Director of the Cambridge Center for Finance, Technology & Regulation University of Cambridge

Andrei is the Founding Director of the Cambridge Centre for Finance, Technology and Regulation (CCFTR). His research interests include the intersection of finance, technology, and regulation, fintech, asset pricing, data, digital technologies, and the design of automated financial markets. He previously served as Chief Economist of the US Commodity Futures Trading Commission (CFTC), where he used modern analytical tools and methods to design and enforce an effective regulatory regime of financial markets.He's a member of the Finance subject group at Cambridge Judge Business School, which focuses on the investment and financial decisions of institutions.



Michael Olmstead | Partner, Chief REvenue Officer, Angel Investor Plug and Play

Michael is the Chief Revenue Officer and a Partner at Plug and Play. He leads sales (~\$100M) and corporate partnerships globally, with a client list of over 500 \$1B+ companies. Michael is responsible for market expansion, including launching Plug and Play's first offices in Paris, Munich, Amsterdam, and Africa. Michael is the Managing Partner of the Plug and Play Future Commerce Fund, a commerce focused fund with LP's including Kohl's, PVH, and TJX.



Tyler Lange | Director, Corporate Partnerships Plug and Play

Tyler started his career as the eighth hire for Plug and Play's Silicon Valley Insurtech practice, which quickly grew to be the largest vertical in Plug and Play's global ecosystem. He led the East Coast market for the practice, working closely with partners across the insurance value chain including Cigna, The Hartford, Guy Carpenter, AXIS, and many more. After Plug and Play, Tyler led insurance go-to-market for unicorn fintech startup, Array, before returning to Plug and Play to lead the firm's first East Coast accelerator, NJ FAST.



Justin Murray | Ventures Associate Plug and Play

Justin Murray has been building the technology and startup ecosystem in New Jersey for the past 6 years. His experience has been on the operator side of early stage tech startups like Black Crow AI and on the community side through his previous involvement with TechUnited:NJ. At Plug and Play, Justin is the Ventures lead for the northeast - focused on fintech & insurtech investments through NJ FAST and through the local ecosystem. He will also be focused on bridging the gap between NJ/NYC and Silicon Valley.



Kristin Bennett | Associate Director of the IDEA Rensselaer Polytechnic Institute

Dr. Bennett brings over 30 years of research experience in artificial intelligence, machine learning, and their applications to problems in health, science, and industry. Her research specialty is working with people with problems and data and then developing novel machine learning and AI models and work flows to solve their problems. She serves as Associate Director of Institute of Data Exploration and Applications (IDEA). Her role is to both lead major data science research projects, develop and lead teams for new research projects, and create data science research education programs. Her work with industry includes projects with GE (PI) and Global Foundries (co-Pi).



Oshani Seneviratne | Assistant Professor Rensselaer Polytechnic Institute

Oshani Seneviratne is an Assistant Professor of Computer Science at Rensselaer Polytechnic Institute, where she leads the BRAINS (Bridging Resilient, Accountable, Intelligent Networked Systems) Lab. She is also the Associate Director of the Tetherless World Constellation at Rensselaer. Her primary research interest is advancing Decentralized Systems (Web, Blockchain, and Decentralized Learning technologies), and she conducts applied research in health informatics and decentralized finance. Oshani obtained her S.M. and Ph.D. degrees in Computer Science from the Massachusetts Institute of Technology (MIT) under the supervision of Sir Tim Berners-Lee, the inventor of the World Wide Web. She previously served as the Director of Health Data Research at Rensselaer and as a senior software engineer at Oracle Inc.



Zachary Feinstien | Assistant Professor and Director of the Fintech Certificate Program Stevens Institute of Technology

Dr. Zachary Feinstein is an Assistant Professor in the School of Business at Stevens Institute of Technology. He serves as the Director of the FinTech Certificate and is the Secretary/Treasurer for the INFORMS Section on Finance. He has published numerous works in financial systemic risk, decentralized finance, and machine learning. Dr. Feinstein has written multiple articles on financial topics related to popular fiction; these works have been highlighted on Bloomberg TV, the New York Times, and the Wall Street Journal among many other prominent news outlets.



Neil Mody | Partner Kennedys

Neil is an experienced coverage litigator. He has over 20 years' experience handling complex, high-exposure matters, spanning multiple coverage lines and jurisdictions. Neil is passionate about innovation, AI, and KennedysIQ. He is an advocate for diversity, equity, and inclusion in the legal and insurance sectors (and beyond).



Mike Freeman | CEO, PI, Moderator CO-WY Engine

Mike works at the intersection of startups, venture capital, and economic development. He has over 30 years of executive-level experience in the public, private, and non-profit sectors. He has a dual role in managing Innosphere Ventures startup commercialization program and managing our Fund's investments as a General Partner. If you are involved in a high-growth potential startup and seek commercialization services apply to the incubation program at www.innosphereventures.org.



Colby Fisher | Managing Member, Director of Research and Development Hydronos Labs

Experienced software developer, research professional, and consultant with a PhD in Remote Sensing and Global Hydrologic Modeling from Princeton University. Building monitoring and forecasting tools to support disaster planning, risk reduction and resilience across a variety of industries. Skilled in scientific software development, mathematical modeling, high performance computing, and remote sensing, as well as the deployment of these systems in modern cloud-computing environments.



Balbinder Singh Gill | Assistant Professor, Stevens Institute of Technology

Dr. Balbinder Singh Gill is an Assistant Professor of Finance and Sustainability at the School of Business, Stevens Institute of Technology. His research focuses on climate finance, fintech, the political economy of finance, and real estate finance. Dr. Gill has authored five academic papers, four of which are solo-authored and published in leading finance journals. His work has been showcased at major conferences, including those of the American Economic Association, American Finance Association, and the Financial Management Association.



John Bagni | Managing Director, Head of Product Governance | Chairman Products Committee BNY Mellon

John is an entrepreneurial executive with a strong track record of leading teams that grow new businesses and transform old ones. John excels at creating innovative business models, developing high-growth strategies, recruiting and managing highly skilled professionals, while building collaborative relationships across multiple disciplines.



OPEN SESSION: THURSDAY, OCTOBER 24

8:30 - 9:30 A.M.	REGISTRATION, BREAKFAST AND NETWORKING
9:30 - 9:40 A.M.	 CRAFT LEADERSHIP WELCOME Steve Yang, CRAFT Director, Associate Professor, Stevens Institute of Technology Mohammed Zaki, CRAFT Site Director, Professor and Department Head, Rensselaer Polytechnic Institute George Calhoun, CRAFT Managing Director, Professor, Stevens Institute of Technology
9:40 - 9:50 A.M.	 WELCOME FROM RPI/STEVENS LEADERSHIP Liad Wagman, Dean of Lally School of Management, Rensselaer Polytechnic Institute GJ de Vreede, Dean of School of Business, Stevens Institute of Technology
9:50 - 10:00 A.M.	VISION, VALUE PROPOSITION, STATUS UPDATE OF CRAFT • Steve Yang, CRAFT Director, Associate Professor, Stevens Institute of Technolog
10 - 10:30 A.M.	KEYNOTE 1: ANDREI KIRLENKO - "MONEY IS SOFTWARE" • Andrei Kirilenko, Professor of Finance, Judge Business School, Founding Director of the Cambridge Centre for Finance, Technology and Regulation (CCFTR), University of Cambridge
10:30 - 11 A.M.	KEYNOTE 2: PLUG AND PLAY - "PLUG AND PLAY / NJ FAST OVERVIEW" • Michael Olmstead, Partner, Chief Revenue Officer, Angel Investor, Plug and Play • Tyler Lange, Director, Corporate Partnerships, Plug and Play • Justin Murray, Ventures Associate, Plug and Play
11 - 11:15 AM	BREAK
11:15 - 12 P.M.	 PANEL DISCUSSION 1: CRAFT PI EXPERIENCE Steve Yang, CRAFT Director, Associate Professor, Stevens Institute of Technology (Moderator) Kristin Bennett, Associate Director of the IDEA, Rensselaer Polytechnic Institute Oshani Seneviratne, Assistant Professor, Rensselaer Polytechnic Institute Zachary Feinstien, Assistant Professor and Director of the Fintech Certificate Program, Stevens Institute of Technology
12 - 1 P.M.	LUNCH
12:50 - 1 P.M.	 2025 SFS CAVALCADE CONFERENCE AT STEVENS Stefano Bonini, Associate Professor, Stevens Institute of Technology
1 - 1:30 P.M.	KEYNOTE 3: BNY MELLON - "FUTURE-PROOFING WITH INNOVATION: THE KEY TO RESILLIENCE AND RISK MANAGEMENT" • John Bagni, Managing Director, Head of Product Governance Chairman Products Committee, BNY Mellon
1:30 - 3 PM	CRAFT IAB Member Fintech Use Case Presentations - Mohammed Zaki (Moderator) •1:30 - 1:45pm "Quantum Generative Models in Finance" Vanio Markov, Wells Fargo •1:45 - 2:00pm "SmartRisk" Karim Derrick & Neil Mody, Kennedys IQ / Kennedys •2:00 - 2:15pm "Real World Use Cases for Blockchain Technology" Dan Silverman & Gregg Lester, Balcony Technology Group •2:15 - 2:30pm "Innovative Trust Based Payment and Settlement Solutions" Philip Barr & Paul Lashmet, Park Avenue Finance (PAF) •2:30 - 2:45pm "Customizing the 4Thought Platform for Al-Powered Forex Trading: A Hedge Fund Case Study" Adam Faanes, 4Thought Technologies •2:45 - 3:00pm "Generative Al Applications in Financial Services - Opportunities and Challenges" Mike Demissi, BNY
3 - 3:15 P.M.	BREAK
3:15 - 4 P.M.	PANEL DISCUSSION 2: CLIMATE IMPACT • Neil Mody, Partner, Kennedys, (Moderator) • Mike Freeman, CO-WY Engine CEO, PI • Colby Fisher, Managing Member, Director of Research and Development, Hydronos Labs • Balbinder Singh Gill, Assistant Professor, Stevens Institute of Technology
4 - 5:30 P.M.	RECEPTION (GALLERY)



4:30 P.M.

ADJOURN

CLOSED SESSION: FRIDAY, OCTOBER 25

8:30 - 9 A.M.	BREAKFAST & NETWORKING (GALLERY)
9 - 9:45 A.M.	ADMINISTRATIVE MEETING (TECHFLEX) • 9:00 - 9:05 A.M. Mohan Kumar, Directorate for Computer and Information Science and Engineering (CISE) Division of Computer and Network Systems (CNS) Industry • 9:05 - 9:10 A.M. CRAFT Leadership Change - Steve Yang • 9:10 - 9:20 A.M. Affiliate Academic Membership Bylaw Addition - Kathy Schultz/Steve Yang • 9:20 - 9:30 A.M. Fintech Certificate Program - Zachary Feinstein • 9:30 - 9:45 A.M. Status Update on IAB Recommendations - Steve Yang • IP Task Force Update - Chris Snyder • IAB Meeting Changes Recommendations • Delivering Value • Content Management
9:45 - 11:15 A.M.	 PROJECT PROPOSALS Mohammed Zaki (Moderator) 9:45 - 10:00 A.M. Testing Financial Foundation Models Pl: Ali Tajer 10:00 - 10:15 A.M. Privacy-Preserving Synthetic Data Generation for Financial Machine-Learning Tasks Pl: Oshani Seneviratne 10:15 - 10:30 A.M. A Generalized Multi-Purpose LLM-based Al Agents Framework for Financial Decision Making Pl: Steve Yang 10:30 - 10:45 A.M. Quantum Amplitude Estimation: Can Derivatives Valuation and Portfolio Management Benefit From It? Pl: Zhenyu Cui 10:45 - 11:00 A.M. A Framework for Cognitive Process Automation with Agentic Workflow Pl: Arion Cheong 11:00 - 11:15 A.M. A Neurosymbolic Semantic Layer for Compliance Checking Pl: Thomas Ferguson and Stefan Radev
11:15 - 12 P.M.	IAB CLOSED SESSION
12 - 1:30 P.M.	LUNCH (GALLERY)
1:30 - 2 P.M.	IAB REPORT TO ALT
2 - 4:30 P.M.	 CURRENT PROJECT REPORTS Mohammed Zaki (Moderator) 2:00 - 2:22 P.M. Quantum Algorithms for Tail Risk in Loan Portfolios PI: Malik Magdon-Ismail, PS Bank of America 2:22 - 2:44 P.M. Analyzing Financial Information with XBRL-enhanced Foundation LLM PI: Xiaoyang Liu, PS Kennedys IQ, Park Avenue Finance, Wells Fargo 2:44 - 3:06 P.M. Smart Encoding and Automation of Over-The-Counter Derivatives Contracts PI: Oshani Seneviratne, PS Bank of America, Capgemini
3:06 - 3:20 P.M.	BREAK
3:20 - 4:26 P.M.	 CURRENT PROJECT REPORTS Steve Yang (Moderator) 3:20 - 3:42 P.M. Large Transaction Models (LTMs) for FinTech Pl: Kristin Bennett, presented by Aaron Greene, PS Bank of America, IBM, SWIFT 3:42 - 4:04 P.M. Semantically Enhanced Graph Neural Networks for Event-Driven Financial Impact Analysis Pl: Mohammed Zaki, presented by Bolun (Namir) Xia, PS Park Avenue Finance, Wells Fargo 4:04 - 4:26 P.M. Al Compliance Officer Pl: Zachary Feinstein, PS IBM, Park Avenue Finance







