



CRAFT

CENTER FOR RESEARCH TOWARD ADVANCING **FINANCIAL TECHNOLOGIES**

2025 ANNUAL REPORT

RPI




STEVENS
INSTITUTE OF TECHNOLOGY
1870
School of Business

A MESSAGE FROM THE DIRECTORS

Fiscal year 2025 marked a defining moment in CRAFT's trajectory – a year in which we not only expanded our team and research portfolio but also recast the Center's vision for the next decade of fintech innovation. With rapid advances in artificial intelligence, quantum computing, decentralized finance and digital regulatory infrastructure, the fintech landscape is evolving at an unprecedented pace. We took several key initiatives to embrace these challenges.

To remain at the forefront of this transformation, CRAFT undertook an ambitious strategic step by hosting the Fintech 2040 workshop on June 6, 2025, which brought together approximately 50 industry leaders, researchers, regulators and innovators for a collaborative review of the future of financial technology. The workshop generated deep insights, identifying six strategic challenge areas – including AI adoption, security and risk management, innovation scalability, trust and ethics, governance and regulation, and customer experience – that will shape the contours of fintech in the coming decades. These findings are now informing the development of the CRAFT Fintech 2040 White Paper, which will serve as a roadmap for guiding our research, industry collaborations and technology development initiatives.

Alongside this strategic reframing, CRAFT significantly expanded its research agenda in 2025. Across both the spring and fall funding cycles, the IAB recommended support for 11 projects that push the boundaries of AI safety, financial foundation models, risk analytics under systemic stress, insurance contract automation and quantum resilience in digital asset systems. These investments demonstrate CRAFT's commitment to supporting high-impact, future-oriented research that is both scientifically rigorous and directly aligned with real-world industry needs.

In parallel, CRAFT also deepened its engagement with the broader fintech ecosystem through a new Fintech @ Stevens Workshop Series, designed to bring together practitioners, regulators and scholars around emerging themes such as AI governance, digital identity and sustainable finance. This series not only enhances our visibility but also lays the foundation for a CRAFT Talent Network, launched in 2025, which connects students, researchers and industry partners through internships, professional development programs and targeted certification pathways – building a sustainable pipeline of fintech-ready talent.

This year, CRAFT proudly welcomed Prudential as a new full participating member, strengthening our network in insurance, asset management and financial risk. We also expanded our industry partnerships through the addition of XBRL US and Kennedys LLC as affiliate members, bringing expertise in financial data standards and legal/regulatory frameworks that will enhance CRAFT's ability to engage policymakers and contribute to the development of industry-aligned technological and regulatory solutions. CRAFT also made major strides in growing our academic footprint. The University of Connecticut is the newest approved affiliate academic member. Pending members include Northeastern University and the University of Manchester – each bringing unique strengths in analytics, computer science, AI governance, digital finance and socio-technical systems. Their addition significantly enhances CRAFT's research capabilities, expands the talent pipeline and deepens opportunities for multi-institution collaboration.

As we reflect on this transformative year, we look ahead with renewed focus and ambition. Over the next decade, CRAFT will:

Expand interdisciplinary research across AI, quantum computing, decentralized finance, cybersecurity, green finance and regulatory technologies, leveraging our growing faculty expertise, cross-institution research teams and active industry partnerships in these domains.

Build a unified talent ecosystem that bridges industry and academia – combining experiential learning, graduate training and executive education with professional certification programs and career mobility pathways.

Strengthen commercialization and IP pathways through the CRAFT IP/Commercialization Task Force, which aims to accelerate the transition of academic research into deployable fintech solutions, streamline joint IP agreements and enhance technology transfer efficiency for both university and industry partners.

Promote global thought leadership through the Fintech 2040 Series, white papers and joint workshops, positioning CRAFT as a convening hub for industry-academia collaboration on next-generation financial technologies.

Deepen integration with regulators and international organizations by engaging in structured dialogues, policy roundtables and research partnerships with financial authorities and standard-setting bodies. These efforts will ensure that CRAFT's innovations contribute to a more secure, transparent and globally coordinated financial ecosystem.

We extend our deepest gratitude to our industry members, faculty, students and global partners. The collective intelligence and collaboration across the CRAFT community made 2025 not only productive but visionary. Together, we are charting the future of financial technology – responsibly, strategically and with an unwavering commitment to long-term impact.

With anticipation and determination, we look forward to an even more innovative and influential 2026.



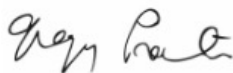
Steve Yang
Director



Mohammed J. Zaki
Co-Director



George Calhoun
Director of Corporate Alliance



Gregory Prastacos
Director of Strategy



Zachary Feinstein
Director of R&D



Jesse Lisnow
Director of Operations

CRAFT OVERVIEW

The Center for Research toward Advancing Financial Technologies (CRAFT) is the first National Science Foundation Industry-University Cooperative Research Center (I/UCRC) in fintech. The IUCRC program, run by the NSF, started in 1973 and currently supports more than 80 centers.

CRAFT is a collaboration between Stevens Institute of Technology and Rensselaer Polytechnic Institute (RPI), funded on July 1, 2021, and formally launched on October 28, 2021. In 2025, the Center expanded its academic network by welcoming the University of Connecticut as the first affiliate academic member.

MEET THE TEAM

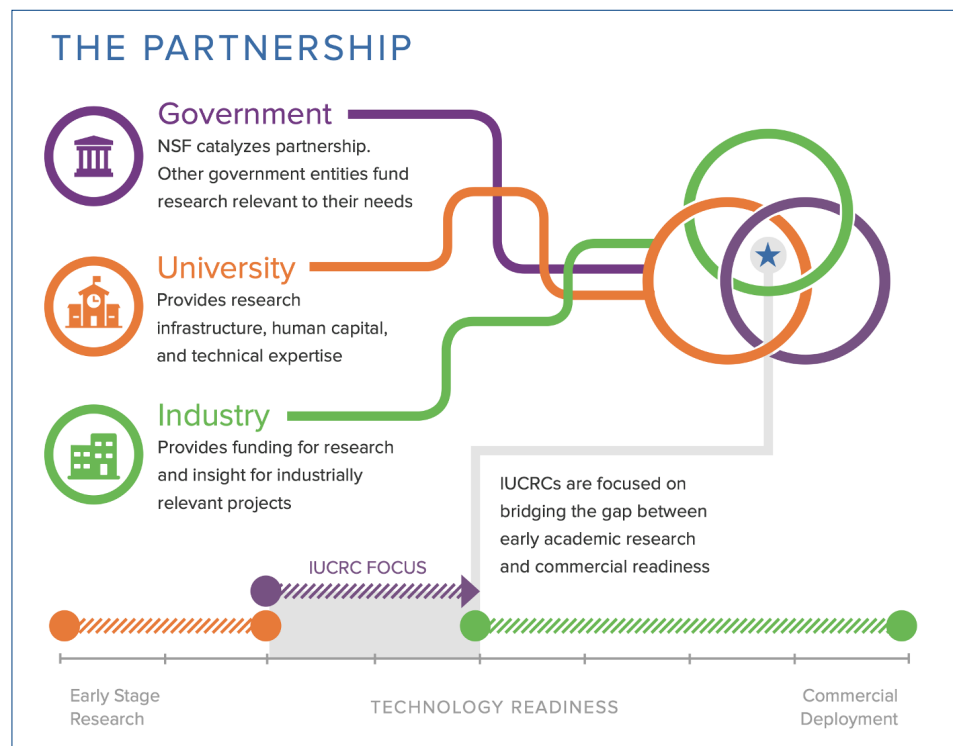
The CRAFT leadership team consists of Dr. Steve Yang (CRAFT Director), Dr. Mohammed Zaki (Co-Director and Site Director) and Dr. George Calhoun (Director of Corporate Alliance). The leadership team also includes Dr. Gregory Prastacos, former Dean of the

Stevens School of Business, who serves as Director of Strategy, and Dr. Zachary Feinstein, who serves as the Director of Research and Development.

The Academic Leadership Team (ALT) serves as the academic governance arm of the Center and includes Dr. Steve Yang, Dr. Mohammed Zaki, Dr. George Calhoun, Dr. Zachary Feinstein, Dr. Darinka Dentcheva, Dr. K.P. Subbalakshmi, Dr. Kristen Bennett, Dr. Agostino Capponi, Dr. Andrei Kirilenko, Ao Kong and Dr. Maggie Chen. Other members of the team include Kumar Bhaskaran of IBM, who serves as the Industry Chair, Graeme Muirhead of Bank of America, who serves as the Industry Vice Chair, Jesse Lisnow, who serves as the Director of Operations, and Soraina Baez, who serves as the Center's Budget Manager.

SIGNIFICANT RESULTS

CRAFT's work is organized around three main pillars: fintech research and innovation, workforce development and thought leadership. The Center supports research that enables members to design, test and integrate fintech solutions within their organizations. It also leads workforce development initiatives that enhance industry partner capabilities and provide access to critical talent pipelines. As a thought leader in fintech, CRAFT produces leading-edge content, convenes key stakeholders and strengthens its reach through a growing network of domestic and international partnerships. The Center's vision is to be an industry-university hub for research, workforce development and thought leadership in fintech, advancing the



Source: NSF I/UCRC Program Website - https://iucrc.nsf.gov/sites/default/files/2022_11_14_IUCRC%20Webinar_external.pdf

financial industry, related disciplines and generating positive impact on society. CRAFT is dedicated to advancing new research that is collectively endorsed by its industry partners, academic leadership and experts across business, computer science, mathematics, finance, economics, management, law and regulation, risk analytics and the behavioral and social sciences. Working closely with the Industry Advisory Board (IAB), the Center has developed a formal process and research roadmap to foster interdisciplinary collaboration across its sites. CRAFT's extended research roadmap spans several key verticals, including machine learning, artificial intelligence, quantum computing, decentralized finance, generative language models, climate impact and cybersecurity.

CRAFT has created a system to fund research on an annual basis, which includes pre-proposal solicitations,

lightning round presentations, multiple voting, vetting and comment opportunities from Industry members, formal "full" proposal live presentations, office hours and follow-on research. A visual guide is available on page 6.

CRAFT currently has 20 industry partners, representing a broad cross-section of the global financial and technology ecosystem. Our partners include 4Thought, Balcony Technologies, Bank of America Corporate, Bank of America Securities Trading, BNY Mellon, Capgemini, Charles Schwab, CME Group, Finliti, Fintech Connector, Goldman Sachs, IBM, Kennedy IQ, SecureFinAI Lab at Columbia University, Park Avenue Finance, Prudential, The Vanguard Group, the United Nations, XBRL US and Wells Fargo.

The Center has also built an extensive academic network, with more than 70 affiliated faculty members across

CRAFT TEAM



Steve Yang
CRAFT Director,
Stevens Institute of Technology,
Associate Professor



Mohammed J. Zaki
CRAFT Co-Director
Rensselaer Polytechnic Institute,
Professor



George Calhoun
CRAFT Director of Corporate Alliance
Stevens Institute of Technology,
Professor



Gregory Prastacos
CRAFT Director of Strategy
Stevens Institute of Technology,
Professor and Former Dean



Zachary Feinstein
CRAFT Director of Research
and Development
Stevens Institute of Technology,
Associate Professor



Jesse Lisnow
CRAFT Director of Operations
Stevens Institute of Technology



Soraina Baez
CRAFT Budget Manager
Stevens Institute of Technology



Darinka Dentcheva
CRAFT ALT
Stevens Institute of Technology
Professor



K.P. Subbalakshmi
CRAFT ALT
Stevens Institute of Technology,
Professor



Ao Kong
CRAFT ALT
Lead on Private Sector
Partnerships and Engagements,
United Nations



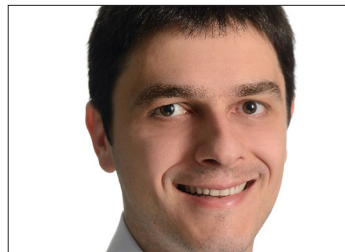
Kumar Bhaskaran
Chair CRAFT Industry
Advisory Board
Financial Services Technology
and Innovation Leader, IBM



Graeme Muirhead
Vice Chair CRAFT Industry
Advisory Board
Managing Director,
Bank of America



Andrei Kirilenko
CRAFT ALT
University of Cambridge,
Professor



Agostino Capponi
CRAFT ALT
Columbia University,
Professor

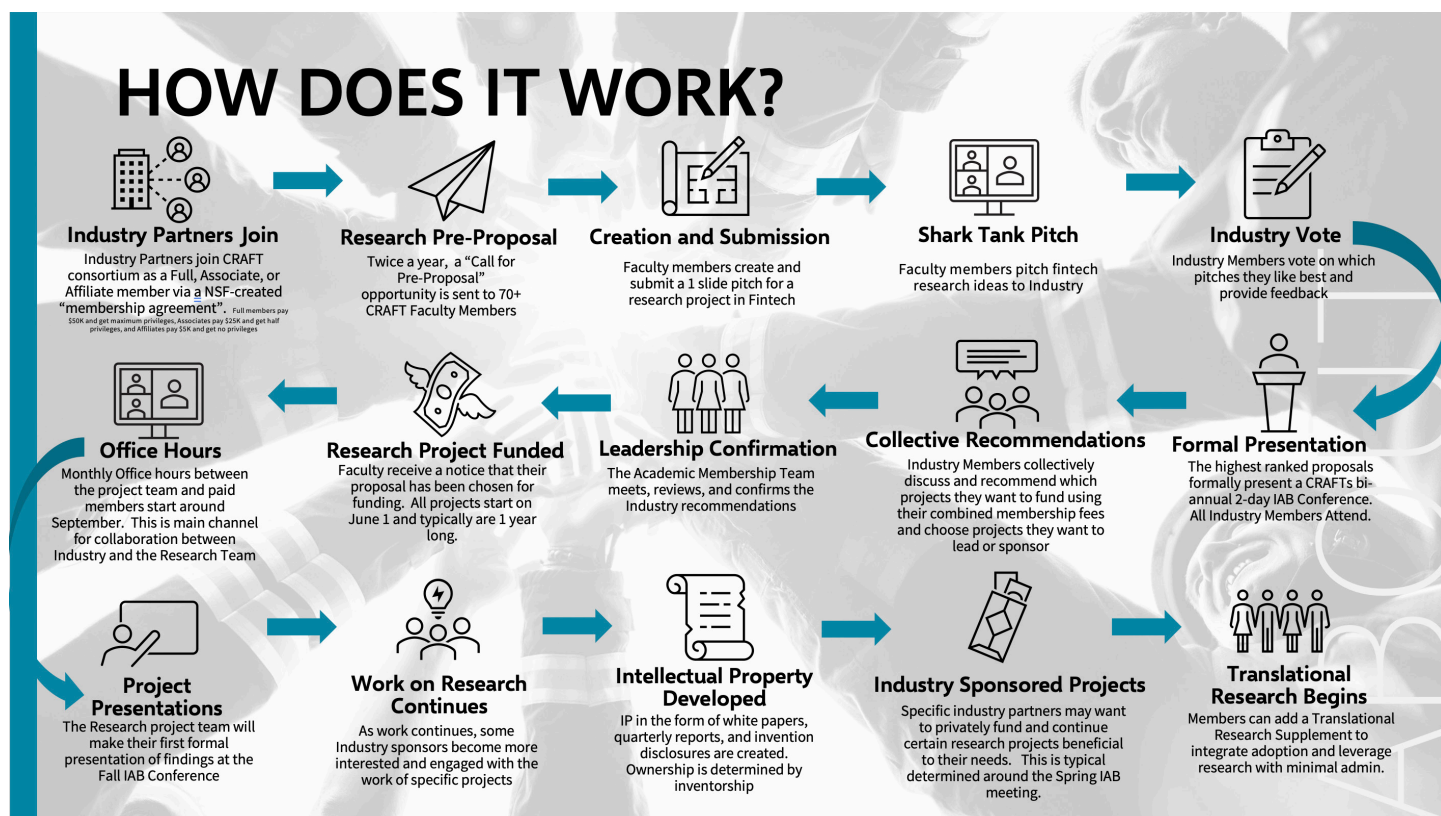


Maggie Chen
CRAFT ALT
Cardiff University,
Personal Chair



Kristin Bennett
CRAFT ALT
Rensselaer Polytechnic Institute,
Professor

HOW DOES IT WORK?



Stevens and RPI. In 2025, the University of Connecticut formally joined CRAFT as an affiliate academic member. We continue to broaden our academic ecosystem through active collaborations with pending members including Northeastern University, Stony Brook University, Pennsylvania State University and the University of Manchester, all of which are expected to join CRAFT either as affiliate or full members in 2026.

In 2025, CRAFT reached several important milestones that strengthened its research portfolio, industry engagement, and strategic direction. The Center funded seven new IAB-recommended research projects, continued five ongoing projects launched in June 2024, selected four projects to fund in 2026 and welcomed Prudential as a new full industry member. CRAFT hosted two Center-wide Industry Advisory Board meetings

and delivered its first industry-hosted workshop, "Fintech in 2040," at Bank of America. To enhance the research pipeline, the Center introduced an additional "triage" layer between pre-proposal submissions and lightning-round presentations. Based on discussions among the CRAFT IP/ Commercialization Task Force, the Center's bylaws were updated to expand industry member access to CRAFT-generated IP. The Center also launched



"CRAFT represents the kind of collaborative innovation that defines the future of financial technology. As the first NSF-funded fintech-focused Industry University Cooperative Research Center, CRAFT brings together the best of academic research and industry expertise to tackle the most pressing challenges in finance. We're proud to stand at the intersection of Wall Street and leading-edge research, making Stevens a true center of excellence in fintech innovation. The work happening in CRAFT matters deeply to our students, our industry partners, and society at large as we create more secure, equitable, and technologically advanced financial systems. CRAFT exemplifies how collaboration between academia and industry can transform entire sectors."

- GJ de Vreede, Dean
School of Business, Stevens Institute of Technology

the CRAFT Talent Network to better connect students with industry opportunities and industry members. CRAFT also held its first research “road show” at Bank of America, presented by Dr. Zachary Feinstein. Dr. Feinstein had also previously presented research at Vanguard. Throughout the year, CRAFT continued recruiting new industry and academic partners, expanded international collaborations – including a partnership with Chulalongkorn University in Thailand – and began preparing its Phase II application to the National Science Foundation, marking the Center’s next stage of growth.

RESEARCH

CRAFT RESEARCH PROCESS

Several months before CRAFT’s biannual Industry Advisory Board (IAB) meetings, more than 70 affiliated faculty members receive a formal call for pre-proposals. These one-slide submissions outline the proposed research title, team, funding request, themes, description, motivation, expected outcomes and anticipated industry benefits.

This year, a new “triage” filter was created due to the overwhelming number of pre-proposals submitted (19). The ALT met to select which of those 19 were best suited to present and chose 10 pre-proposals to move forward based on established Center research themes and roadmap. After the triage filter meeting, pre-proposal faculty met virtually with CRAFT industry members for a “Shark Tank” style, five-minute lightning pitch session. Industry members then vote

and provide feedback on each idea. Following the voting period, the ALT reviews the results and selects the most promising concepts to advance to the full-proposal stage. Faculty chosen to proceed submit detailed proposals and record 10-minute presentation videos, which are presented at the biannual IAB meetings and followed by a five-minute live Q&A session. After these presentations, industry members meet privately to determine which projects they recommend for funding and to identify project “industry leads” and “industry sponsors” – these are industry partners who will collaborate closely with the PIs and may provide data, guidance and other IP-related support. The ALT then finalizes funding decisions in accordance with Center bylaws and communicates the outcomes back to the proposing faculty. All newly approved projects begin on June 1, and either run for six months with \$30,000 of funding (pilot project) or one year with \$100,000 of funding (full project, the most common).

At the Spring 2025 IAB meeting, industry members recommended five new projects for funding, and an additional two projects from Fall 2024 were also advanced. Following CRAFT’s bylaws, the ALT approved funding for all seven projects. Four were awarded full funding at the \$100,000 level (one year; \$400,000 total), and three received pilot funding at the six-month, \$30,000 level (\$90,000 total). As in prior years, each project team completed the standard budget and scope refinement process before kickoff.

All full and associate industry members receive non-exclusive, royalty-free access to CRAFT research outputs – including publications, deployable

technologies, and intellectual property – under the NSF’s standardized I/UCRC IP framework.

In 2025, CRAFT also continued the IP/Commercialization Task Force, which drafted new bylaws creating a “follow-on” project framework. This new structure gives full and associate industry members additional pathways to continue and commercialize research that they find particularly valuable. The framework is summarized in the following section.

CRAFT’s Follow-On Project framework provides industry members with clear, flexible pathways to continue research that emerges from Center-funded projects. When an industry partner elects to fund a Follow-On Project with participating academic investigators, both parties negotiate a sponsored research agreement in good faith. Under this structure, intellectual property created solely by one party is owned by that party, while jointly developed IP is jointly owned. Industry members contributing at least \$100,000 per year toward a Follow-On Project may elect to receive a non-exclusive, royalty-free commercial license, along with the ability to sublicense to defined affiliates, while sharing in associated patent costs.

Additionally, any industry partner funding a Follow-On Project, regardless of contribution level, may opt for a non-exclusive, royalty-free license for internal research and evaluative use of the resulting IP. This framework strengthens collaboration, supports commercialization and ensures that industry partners have well-defined mechanisms to continue advancing high-impact work beyond the initial project cycle.

SEVEN FUNDED PROJECTS IN 2025-2026

“A MULTI-AGENT AI APPROACH FOR ENHANCING ACCOUNTING ESTIMATES” PI: ARION CHEONG (STEVENS)



The primary objective of this proposal is to design a multi-agent system powered by a large language model (LLM) that aims to enhance the accuracy of accounting estimates by identifying potential sources of error. Our approach involves LLM-based agents that dynamically analyze potential irregularities in financial estimations. Specifically, these agents systematically test various modifiers to refine and improve the accuracy of the accounting estimates. Therefore, we will integrate an iterative model where agents simulate different “what could go wrong” scenarios using exogenous and endogenous information that could potentially alter such accounting estimates. This approach will enhance the accuracy and consistency of financial reporting.

“A NEUROSymbolic SEMANTIC LAYER FOR COMPLIANCE CHECKING” PI: THOMAS FERGUSON (RPI)



Ensuring regulatory compliance through traditional methods involves a great deal of interpretation and overhead. Existing data-driven methods of ensuring compliance do not permit reliable and explainable use of all information concerning regulatory policies; moreover, applications relying on large language models alone run the risk of relying on hallucinatory outputs, leading to potential (and costly) violations of regulatory policies. This project offers a suite of neurosymbolic tools to extract and leverage semantic representations of regulatory policies concerning the financial and insurance domains, whether from text of regulations themselves, agency guidance or regulatory digesting services like Aosphere. The techniques that we have prototyped allow the extraction of auditable, machine-readable semantic representations of such policies from text in the form of regulatory knowledge graphs.

The ultimate deliverables of the project will be a suite of APIs to allow the integration of these graphs with relational business data, supporting real-time alerts and new methods of faceting, analyzing and preparing for compliance.

“ASSESSING THE RISKS OF ALTERNATIVE DATA” PI: ZACH FEINSTEIN (STEVENS)



Over the past decade, the adoption of alternative data sources, including satellite imagery, geolocation tracking, social media sentiment and communication data, has surged within financial markets. While these non-traditional datasets offer enhanced predictive power, they introduce novel risks related to data vendors, regulatory compliance and operational/model risk. Our project aims to (1) classify and systematically categorize risk types specific to alternative data usage in financial decision-making and (2) quantify the model risks arising from the application of explainable artificial intelligence (XAI) methodologies in these contexts. In addition to the proposed XAI framework, our research aims to provide guidance and policy for financial institutions to mitigate the associated risk exposures with alternative data.

“EXPLAINABLE RISK AND COVERAGE WITH COMPUTABLE INSURANCE CONTRACTS”

PI: OSHANI SENEVIRATNE (RPI)



This project aims to revolutionize the insurance industry by developing computable insurance contracts that enhance risk assessment, claims processing and policy transparency, capable of real-time risk analysis, claims adjudication and scenario testing. This shift enhances operational efficiency and addresses longstanding challenges in explainability, enabling insurers, policyholders and regulators to trace coverage decisions to specific contractual logic. Leveraging advanced technologies such as fine-tuned Large Language Models (LLMs), Retrieval-Augmented Generation (RAG) and declarative logic, the proposed framework will transform unstructured insurance policies into structured, machine-readable and executable formats. The methodology encompasses structured rule extraction, declarative modeling, logical inference for validation and contract code

generation. Key outcomes include a benchmark dataset of annotated insurance contracts, automated policy text transformation tools and publications in top-tier conferences. The project addresses critical industry challenges such as claims processing inefficiencies, lack of policy transparency and difficulties in quantifying cumulative exposures across portfolios. By enabling explainable risk analysis and detailed gap analysis, the computable contracts will benefit insurers, underwriters and insured parties alike. The project aligns with CRAFT’s research goals by advancing explainable AI in finance, enhancing risk management and promoting interdisciplinary collaboration between academia and industry partners.

“IDENTIFYING DRIVERS OF VOLATILITY IN ENERGY COMMODITY MARKETS” PI: SEBASTIAN SOUYRIS (RPI)



The energy commodities market has recently experienced heightened volatility due to global disruptions including geopolitical conflicts, climate change and the renewable energy transition. Traditional economic and machine learning models struggle to fully capture the latent factors driving these fluctuations, limiting their predictive power. This research proposes an innovative framework that employs the use of large language models (LLMs) to extract sentiment from market news and a Group Fixed Effects (GFE) model to uncover hidden market dynamics. By systematically analyzing unstructured textual data and combining it with advanced econometric modeling, this project aims to uncover the demand and supply shocks driving commodity price volatility while producing actionable insights. The outcomes of this project will generate value to the members of

CRAFT through the improvement of risk assessment models, actionable insights for commodities traders and informing regulatory strategies. By bridging machine learning, economic modeling and commodities markets, this research advances financial stability, aligns with regulatory needs and contributes to CRAFT’s mission of fostering responsible and explainable financial technologies.

“As Generative AI reshapes finance, CRAFT is stepping forward with a renewed vision – uniting research, talent, and industry partners to lead the next decade of responsible fintech innovation.”

— Steve Yang, CRAFT Director, Associate Professor
School of Business, Stevens Institute of Technology



“PRIVACY-PRESERVING SYNTHETIC DATA GENERATION (THROUGH DATA DISTILLATION) FOR FINANCIAL MACHINE-LEARNING TASKS” PI: OSHANI SENEVIRATNE (RPI)



Financial organizations possess vast amounts of sensitive data, which is crucial for applications like fraud detection, credit scoring and market trend analysis. However, the stringent privacy regulations severely restrict how the data can be used and shared, which limits its potential benefits in such applications. Synthetic data generation offers a promising approach to enable data sharing within and outside financial institutions. However, if not properly crafted, synthetic data can retain information about the input data that attackers can reverse-engineer. This project proposes a privacy-preserving synthetic data generation approach based on data distillation. Data distillation offers two main benefits over methods such as generative adversarial networks. First, distilled datasets provide more inherent privacy protection with better performance on

downstream tasks, and second, distilled datasets yield more efficient training, which leads to faster innovation and development. We will create data distillation mechanisms that innovate beyond the state-of-the-art by carefully tailoring them to financial downstream tasks to provide high utility while simultaneously providing rigorous privacy guarantees. Our project will produce data distillation tools, a privacy auditing framework, and an evaluation of key use cases identified by CRAFT IAB members.

“TESTING FINANCIAL FOUNDATION MODELS’ SAFETY VIA CAUSAL LEARNING” PI: ALI TAJER (RPI)



Foundation models (FMs) such as large language models (LLMs), are expected to become integral parts of various automated decision-making content-creation processes. However, they suffer from safety issues such as hallucination (e.g., generating irrelevant content), biases (e.g., race and gender), lacking privacy guards (e.g., leaking information based on the prompts), lacking fairness (due to lack of explicit reasoning) or violating regulatory compliance (when used for decision-making). Red-teaming is the process of finding vulnerabilities, biases, or undesirable behaviors in FMs and LLMs. It stress-tests a model by generating adversarial attacks, probing for weaknesses and assessing its potential for generating those that are inaccurate, biased or unethical, or responses that violate regulatory compliance or leak private

information. We will use causal learning/reasoning to develop theoretically principled tools for testing the bias of FMs. These causal reasoning tools facilitate assessing the safety of given models by designing proper interventions to the system (prompts), collecting interventional data (LLM output) and testing counterfactuals (e.g., testing for bias). This can especially prove to be useful in testing fine-tuned models. For instance, task forgetting (i.e., performance drop on previously learned tasks) is a known issue of LLMs. Similarly, a desired property, such as bias (against fairness) can be lost upon fine-tuning, which can be interpreted as a mechanism change. Causal inference can detect such changes by testing invariance under targeted probes. These are critical to ensure that FMs in financial systems meet regulatory compliance. For experiments, our primary focus will be on the vulnerability of Granite and Granite Guardian models. For benchmarking, we will also assess other LLM families (Llama 70b Instruct, Mistral 8x7b, Llama 7b, Mistral 7b,). For fast implementation and evaluation, we build an automated pipeline for prompt generation and evaluation, where we adopt an LLM-as-a-judge on a benchmark LLM (Mistral 8x7b).

To view the full projects in further detail, please visit our current research website.

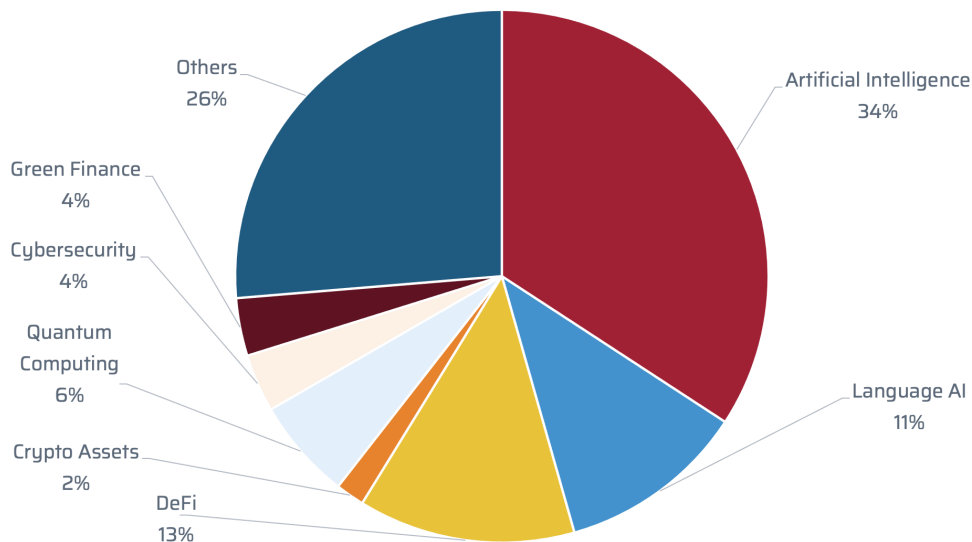


“As breakthroughs in AI, data science and decentralized systems reshape the financial landscape, CRAFT stands at the forefront of pioneering research. Together with our industry members, we are charting the future of financial technologies and shaping the next generation of innovation.”

— Mohammed Zaki, CRAFT Co-Director, Professor and Department Head for Computer Science, Rensselaer Polytechnic Institute

PROPOSAL DISTRIBUTION

Total # of Proposal (114)



WHERE WE STAND

The CRAFT Center has had five major funding cycles - 2022 - 2023 (Year 1), 2023 - 2024 (Year 2), 2024 - 2025 (Year 3), 2025 - 2026 (Year 4) and 2026 - 2027 (Year 5). Since the first funding cycle in June 2022, the Center has funded 28 projects (24 currently running or completed), and allocated nearly \$2,400,000 of membership fees on fintech research, worked with 160 students, produced 84 quarterly reports, 40 report presentations, 23 conference papers, 12 white papers, two invention disclosures, seven journal articles and has one patent pending. Since project proposals began, we have had 114 research proposals submitted. This gives the Center a 24.5% acceptance rate.

“The true strength of CRAFT’s research efforts lies in its diversity. We are simultaneously pushing the boundaries of ‘deep tech’ through AI, decentralized finance and quantum technologies. This holistic approach ensures we are engineering a financial system that is not only faster and more efficient, but also more resilient.”

- Dr. Zachary Feinstein, CRAFT Director of Research and Development, Associate Professor, School of Business, Stevens Institute of Technology



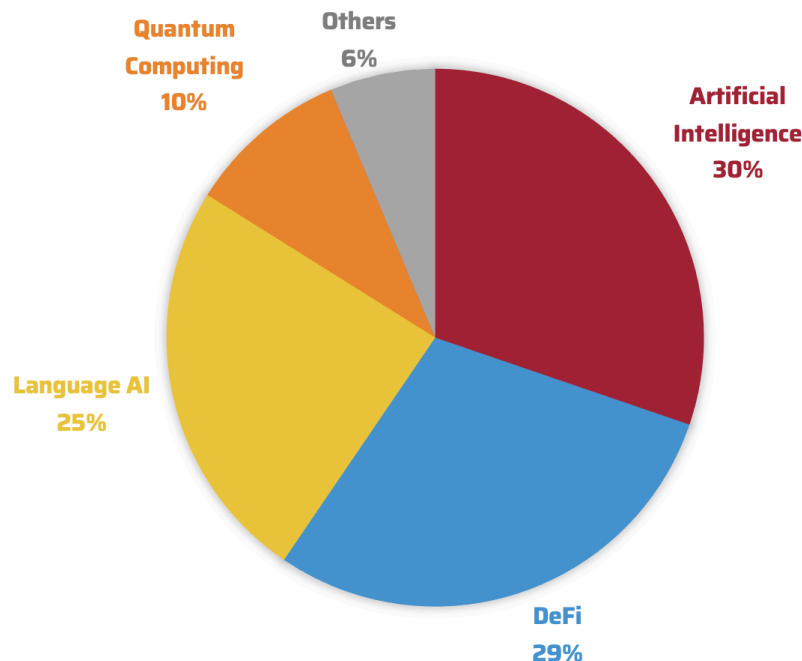


“As CRAFT’s network of academic, industry and global partners continues to expand, we remain dedicated to advancing innovation and research across AI-enabled finance, quantum computing, decentralized systems, climate-resilient investing and regulatory technology – while developing the next generation of fintech talent to lead this evolving field.”

- Gregory Prastacos, CRAFT Director of Strategy, Professor and Former Dean School of Business, Stevens Institute of Technology

FUNDING DISTRIBUTION

TOTAL FUNDING: \$2,150,000
5 YEARS



“CRAFT continues to expand its influence by bringing together industry leaders, academic researchers and technology innovators to address the most pressing challenges in financial technology. As we grow our corporate consortium, we are not only strengthening the pipeline of cutting-edge research but also creating a unified voice that can help shape the direction of fintech policy and regulation. In the coming years, CRAFT will play an even more active role in providing thought leadership to policymakers and industry stakeholders – ensuring that technological progress is matched with clarity, responsibility and a shared vision for the future of finance.”

- Dr. George Calhoun, CRAFT Director of Corporate Alliance and Professor, School of Business, Stevens Institute of Technology



SPOTLIGHT SERIES

CRAFT is excited to introduce the CRAFT “Spotlight Series” where we will share a Q&A with one faculty member and one industry member in each annual report. For the series kickoff, we are excited to share with you Q&As with Oshani Seneviratne, Assistant Professor at Rensselaer Polytechnic Institute, and Paul Lashmet, Business Integration Architect at Park Avenue Finance.



OSHANI SENEVIRATNE

Oshani Seneviratne is an Assistant Professor of Computer Science at Rensselaer Polytechnic Institute (RPI), where she leads the BRAINS Lab (Bridging Resilient, Accountable, Intelligent Networked Systems). Her research focuses on decentralized web technologies, blockchain and learning, with applications in health informatics and fintech. Her research has been recognized with multiple best paper awards and the Yahoo! Key Scientific Challenges Award.

How has collaborating with CRAFT's industry partners strengthened or shaped the direction of your research project?

Collaborating with CRAFT's industry partners has been truly transformative, pushing several of my projects far beyond theoretical prototypes into

solutions grounded in real operational needs. Our work with Prudential on computable insurance contracts, for example, has enabled us to refine risk-coverage models using authentic policy structures and terminology, ensuring both technical rigor and industry relevance. Likewise, Bank of America's involvement in our OTC derivatives automation project provided sample contracts and direct access to ISDA experts, which sharpened our focus on standardization and regulatory compliance. Collaboration with Swift on blockchain interoperability further allowed us to model realistic cross-border payment workflows and fraud detection considerations, fundamentally shaping our methodologies and accelerating the translation of research into deployable frameworks.

What was your motivation for studying the industry problem that your projects directly addresses?

As an applied AI and blockchain researcher, I am motivated by industry challenges where inefficiencies, ambiguity and lack of transparency have real financial and societal consequences. For example, in our work on computable insurance contracts that is sponsored by Prudential, we observed how coverage gaps and unclear policy language can lead to costly disputes and delayed claims processing, motivating us to create more precise and explainable representations of coverage and risk. Likewise, the OTC derivatives automation project with Bank of America revealed how manual contract interpretation slows trading and compliance workflows, inspiring our efforts to encode these contracts in standardized, machine-readable formats. In the blockchain interoperability space, collaboration with Swift highlighted the operational hurdles in cross-border payments, where platform fragmentation affects speed and trust, driving our exploration of secure, interoperable mechanisms that improve efficiency and transparency at scale.

Can you share an example of insight, feedback or data provided by industry members that meaningfully improved your project's methodology or outcomes?

Industry input has repeatedly reshaped our approach in powerful ways. For instance, Bank of America's sample OTC derivative contracts exposed subtle variations in clause structure that

prompted us to redesign our encoding pipeline to handle real-world legal heterogeneity. And in our blockchain interoperability project, collaboration with Swift enabled us to model a realistic cross-border payment workflow, ensuring our prototype reflects operational constraints and messaging standards used globally.



PAUL LASHMET

Paul Lashmet is a business integration architect with expertise in orchestrating global strategic programs across the financial services landscape, including capital markets, investment banking, mortgage, retail banking and wealth management. He has a proven track record of optimizing risk mitigation

and revenue generation through a cross-functional and layered approach to evaluating challenges and implementing solutions. As a former senior vice president at HSBC and through leadership roles at Deutsche Bank, Fannie Mae, Salesforce and Cloudera, Paul has been recognized by colleagues as an enterprising contributor with the ability to articulate complex issues, uncover new opportunities and identify patterns and connections not obvious to others. At Park Avenue Finance, Paul focuses on the continual improvement and optimization of business and operational processes and procedures, primarily through the development and distribution of learning content and knowledge management. Paul is actively involved in mentoring and advancing the development of younger generations, primarily through his local Scouts BSA program.

Can you describe specific ways CRAFT's research project findings or tools could impact your organization's workflow, decision-making, risk management or product development?

We look for research that can be commercialized and integrated into our operations. When findings improve accuracy, automate compliance, or

streamline processes, they directly influence how we manage risk and develop products. The goal is practical application, tools that reduce friction and create measurable efficiency.

What aspects of the CRAFT research process, such as consortium networking, IAB meetings, project team engagement and workshops, have been most valuable to your firm?

Direct engagement with project teams and structured discussions during advisory meetings are most useful. They allow us to assess commercialization potential early and align research with real business needs. Networking is helpful, but actionable insights from these sessions matter most.

Looking ahead, how do you anticipate CRAFT research projects, or the broader CRAFT ecosystem, shaping your innovation roadmap or technology strategy over the next few years?

We expect research to inform areas where automation, AI and compliance intersect. Our roadmap prioritizes solutions that can scale and deliver operational benefits. The ecosystem provides access to ideas we can adapt quickly into products and services.

"CRAFT has achieved significant progress in aligning its research agenda with the strategic priorities of the financial services industry. The Center is driving the development of AI models and tools that are fit-for-purpose for real-world financial services applications. By bridging the gap between emerging technologies and industry challenges, CRAFT validates innovative solutions, advances responsible AI practices, and accelerates transformative solutions that drive value to financial institutions."

- Dr. Kumar Bhaskaran, Chair CRAFT Industry Advisory Board, Financial Services Technology and Innovation Leader, IBM



EVENTS

Throughout 2025, CRAFT was involved in many events that have further propelled the Center's initiatives.

SPRING 2025 INDUSTRY ADVISORY BOARD MEETING

The Spring 2025 Industry Advisory Board Meeting convened over two days and featured a robust lineup of presentations from CRAFT leadership, academic researchers and industry partners. Day 1 opened with remarks from CRAFT and academic leadership, followed by two keynote addresses. The first keynote was delivered by Saed Shonnar, Director of the AI Hub at BNY Mellon, who discussed the bank's transformative journey in AI adoption. His talk explored how a Global Systemically Important Financial Institution (G-SIFI) identifies high-impact AI use cases, builds a scalable AI infrastructure, and advances responsible AI and workforce upskilling. He also highlighted *Eliza*, BNY Mellon's enterprise AI platform, and the firm's collaborations with OpenAI and Nvidia to enhance operational efficiency and drive innovation. The second keynote, delivered by Xiao-Yang Liu, examined MOF and FinGPT developments at the Columbia Fu Foundation School of Engineering and Applied Science.



Day 1 also included a full slate of presentations from currently funded CRAFT research projects, along with a presentation by the Rensselaer Finance Club. A panel discussion titled "Digital Disruption in the Age of AI" featured Kumar Bhaskaran, Liad Wagman and Saed Shonnar, offered diverse perspectives on technological disruption across financial services. Industry partners Finliti and IBM delivered IAB use case presentations and faculty from the University of Connecticut presented a series of research talks: *Asset Allocation with Artificial Neural Networks* (Yaacov Kopeliovich), *Constrained FNN Risk Scoring Models in Telematics Insurance* (Bin Zou), *When Should You Mint or Burn Tokens in DeFi?* (Bin Zou), *Self-Organized Criticality Model: Predicting Black Swan Events Before They Happen* (Mary Salvana), *Setting Salaries in Daily Fantasy Sports* (David Bergman), *Optimal Parlay Building* (David Bergman) and *Investors in Real Assets When There Are Natural Disasters* (Jeff Cohen).

Day 2 began with the administrative meeting, followed by the presentation of new research proposals. These included: *Model-free Robo-advisor: A dynamic mean quadratic variation portfolio optimization framework* (PI: Zhenyu Cui); *Testing Financial Foundation Models' Safety via Causal Learning* (PI: Ali Tajer); *Operationalizing Privacy-Preserving Federated Learning for Financial Applications in Fraud Detection* (PI: Stacy Patterson); *Network-based Artificial Intelligence for Risk-Averse Investment in Stock Market* (PI: Foad Pajouh); *Enhancing Financial Predictions with Quantum Computing, Knowledge Graphs, Natural Language, and Machine Learning* (PI: Deborah McGuinness); *Assessing the Risks of Alternative Data* (PI: Zachary Feinstein); *A Multi-Agent AI Approach for Enhancing Accounting Estimates* (PI: Arion Cheong); *Drivers of Volatility in Energy Markets — Identifying Drivers of Volatility* (PI: Sebastian Souyris); and *Explainable Risk and Coverage with Computable Insurance Contracts* (PI: Oshani Seneviratne).



The meeting concluded with a CRAFT Leadership and IAB closed session titled "Future of CRAFT," followed by formal IAB voting and an IAB report-out to the Academic Leadership Team. The Spring 2025 meeting underscored the Center's continued commitment to advancing industry-driven research, strengthening academic-industry collaboration and shaping the future of financial technology.

FINTECH IN 2040 WORKSHOP AT BANK OF AMERICA

In June 2025, CRAFT hosted its inaugural Fintech 2040 workshop at Bank of America, bringing together nearly 50 leaders from academia, industry and government to explore the long-term future of financial technology. Facilitated by Dr. Ann Murphy, the session engaged participants from major financial institutions, consulting firms, startups and universities across the U.S. and Canada in a structured discussion on the strategic forces that will shape fintech over the next 15 years.

Through collaborative analysis, the group identified eight overarching strategic challenges: AI adoption, security and risk management, innovation and scalability, governance and regulation, trust and ethics, customer experience and literacy, technology integration and macroeconomic externalities. AI emerged as a unifying theme, influencing every other challenge and reinforcing the need for responsible, secure and transparent adoption of emerging technologies.

Participants emphasized the importance of balancing innovation with ethical governance, strengthening collaboration between fintech startups and traditional institutions, and developing a workforce capable of operating in increasingly AI-driven financial environments.

Insights from the workshop will inform a forthcoming Fintech 2040 White Paper, which will articulate each challenge in depth and outline actionable strategies for industry-academic collaboration. To advance this effort, CRAFT will establish a Fintech 2040 Task Force, co-led by academic and industry representatives, to refine the workshop's findings and oversee development of the white paper.



“What sets CRAFT apart is that it has created a unique collaborative research environment focused on industry-guided projects. These projects give us early insights into potential solutions to address the evolving needs of global financial institutions, including enhanced risk management, increased resilience and efficiency and productivity improvements.”

**- Graeme Muirhead, Vice Chair CRAFT Industry Advisory Board,
Managing Director, Bank of America**

FALL 2025 INDUSTRY ADVISORY BOARD MEETING

CRAFT held its biannual Fall 2025 Industry Advisory Board (IAB) Meeting on October 23–24, 2025, at the Stevens Institute of Technology. The two-day conference featured presentations from CRAFT leadership, academic partners and industry members, alongside keynotes, project proposals and strategic discussions about the Center’s future research direction.

Day 1 began with remarks from CRAFT leadership, followed by a keynote address from Vall Herard, CEO and Co-Founder of Saifr, titled “*Practical Explanations vs Full Explainability – AI Agent Adoption for Regulatory Compliance.*” The keynote explored the evolving role of explainability in AI-driven regulatory systems and the practical trade-offs financial institutions must navigate as they adopt intelligent agents for compliance operations. The agenda continued with a presentation from Northeastern University, an overview of the upcoming High Frequency Trading Competition Spring 2026 and a series of new project proposal presentations. These proposals included:

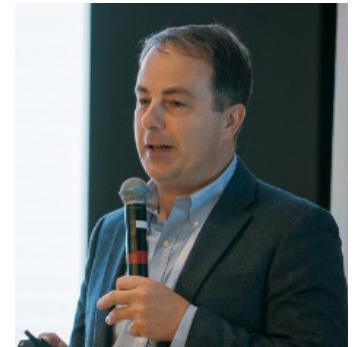


- *Algorithmic Market Making for Tokenized Securities*, PI: Zachary Feinstein
- *Cascade-Adjusted Risk Analytics: Embedding Self-Organized Criticality into Value-at-Risk and Expected Shortfall*, PI: Oshani Seneviratne
- *Financial Multimodal LLMs via Novel Semantic GraphRAG*, PI: Mohammed Zaki
- *Quantum Resilience of Proof-of-Work Cryptocurrencies*, PI: Stacy Patterson
- *Network analysis for crowdfunding fraud detection*, PI: Jianxi Gao

The afternoon sessions included a presentation from Stony Brook University, followed by a second keynote address: “FinTech and Regulation” delivered by Dr. Douglas Cumming, Professor of Finance at Stevens Institute of Technology. The keynote examined regulatory trends shaping fintech innovation and the challenges that lie ahead for both regulators and market participants.

Day 1 concluded with a panel discussion titled “The Future of Fintech,” moderated by Ian Mehok of Prudential Financial, and featuring Arion Cheong (Stevens), Zachary Feinstein (Stevens), Thomas Ferguson (RPI) and Oshani Seneviratne (RPI). IAB members then presented several real-world industry use cases, including:

- *Industry Use Cases of FinAgents Powered by FinGPT*
 - Xiao-Yang Liu (Yanglet), Director of Research Lab and Startup Founder, SecureFinAI Lab
- *mTrace: Real Estate Intelligence for Risk, Ownership, and Compliance*
 - Alexander McGee, Co-Founder & Chief Business Officer, Balcony Technology Group
- *Real-World GenAI Solutions Driving Efficiency and Growth*
 - Paul Lashmet, Business Integration Architect, Park Avenue Finance
- *Building and Deploying AI Agents*
 - Rohit Kapa, Vice President, Data Science, Prudential Financial



Dr. Douglas Cumming
Professor of Finance
Stevens Institute of Technology

Day 2 opened with the administrative meeting and a discussion of research plans for CRAFT’s Phase II, followed by presentations from currently funded project teams. The meeting concluded with formal IAB voting and the IAB report-out to the Academic Leadership Team, ensuring that CRAFT’s research trajectory continues to be driven by industry needs and collaborative insight.

INFRASTRUCTURE

CRAFT's main offices are located at the Stevens Institute of Technology School of Business. The School of Business allocated an entire wing for CRAFT, which includes nine offices, a conference room able to fit 30-plus people, an additional nine to 12-person executive conference room and two cubicles. Affiliated faculty has grown to 70 across business, science, technology and social science disciplines at both Stevens and RPI. The University of Connecticut has joined the Center as an affiliate academic member. Northeastern University, Stony Brook University, Pennsylvania State University and the University of Manchester are slated to join CRAFT in 2026.



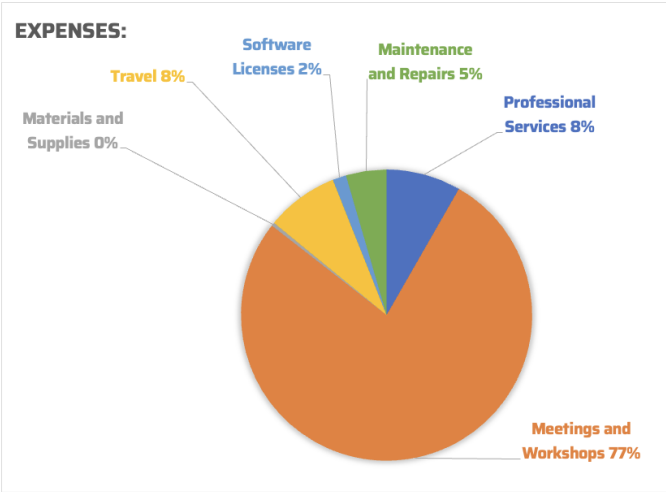
ACCOMPLISHMENTS AND MILESTONES

- Since the first project funding cycle in June 2022, CRAFT has funded a total of 28 funded CRAFT research projects, spent nearly \$2,400,000 on research and worked with 160 students.
- CRAFT has had a total of 114 submitted proposals, 28 of which have been funded, resulting in a 24.5% acceptance rate.
- Research Projects have produced 84 quarterly reports, 40 report presentations, 23 conference papers, 12 white papers, two invention disclosures, seven journal articles and one patent pending.
- CRAFT hosted its eighth and ninth bi-annual IAB Meetings, “Fintech in 2040” workshop and first “road show” at Bank of America.
- CRAFT launched the “CRAFT Talent Network.” Student information will be shared directly with full/associate members to expand access to talent pipelines.
- The University of Connecticut joined CRAFT as the first affiliate academic member in February 2025.
- Prudential joined CRAFT as a full member as the Center implements insurance-based initiatives.
- CRAFT continued the IP/Commercialization Task Force which resulted in new bylaws being created to give full/associate industry members further access to research IP.
- Dr. Zachary Feinstein, CRAFT’s Director of Research and Development, officially joined the ALT. RPI is expected to add two new ALT members to balance university participation. CRAFT added a new triage layer of filtering to pre-proposals before they are presented to the IAB members at the lightning rounds. The ALT will now vet the submitted pre-proposals to ensure that they meet established CRAFT research themes. Screening projects in this manner allows the IAB to focus on relevant proposals.
- CRAFT maintains its official website at www.stevens.edu/craft. The website is updated regularly with essential information.
- CRAFT plans to host the INFORMS Conference in November 2026.

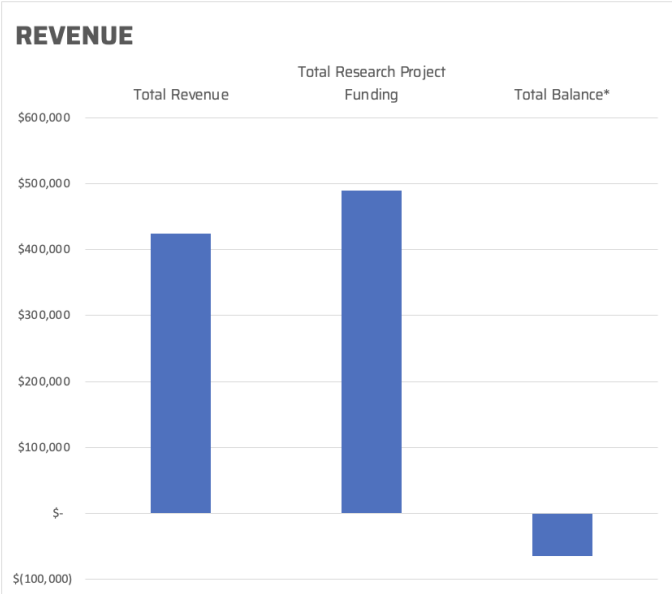
To see a list of additional events and activities, please see Appendix A

CRAFT BUDGET OVERVIEW

Budget data is from fiscal year 2025 - July 1, 2024 to June 30, 2025



Expenses		
Professional Services	\$	1,310
Meetings and Workshops	\$	12,214
Materials and Supplies	\$	61
Travel	\$	1,273
Software Licenses	\$	240
Maintenance and Repairs	\$	713
Total Expenses	\$	15,811



Revenue		
Total Revenue	\$	424,625
Total Research Project Func	\$	490,000
Total Balance*	\$	(65,375)

*balance deficit was resolved with unused revenue from FY22 onward

CRAFT GROWTH OBJECTIVES

To advance the Center’s long-term vision and strengthen our leadership in next-generation financial technologies, CRAFT will pursue the following strategic priorities:

1. ADVANCE HIGH-IMPACT RESEARCH ALIGNED WITH INDUSTRY AND SOCIETAL NEEDS

CRAFT will continue to drive interdisciplinary research that addresses the most pressing technological and economic challenges facing the financial sector. Building on insights from the Fintech 2040 initiative, CRAFT will:

- Prioritize research in frontier areas such as AI safety and alignment, systemic risk under stress, quantum-safe financial systems, digital asset trust infrastructure and next-generation regulatory technologies.

- Ensure all funded projects are grounded in industry needs, with clear translational value, data relevance and pathways toward real-world deployment or commercialization.
- Strengthen collaboration with corporate innovation groups, venture investors and incubators to accelerate high-potential research outputs into market-ready tools, products and services.
- Promote cross-institution, cross-disciplinary research teams, leveraging the expertise of our expanding affiliate university network in analytics, computer science, law and socio-technical systems.

2. BUILD A UNIFIED AND SCALABLE FINTECH TALENT ECOSYSTEM

To support a rapidly evolving workforce landscape, CRAFT will expand its educational and talent-development activities through:

- Professional development workshops and industry-inspired short courses and executive certificate programs.
- A cross-university fintech talent network linking students, faculty and employers across disciplines and institutions.
- Certification and credentialing programs developed jointly with the NGO Committee on Private Sector Development at the United Nations, with dedicated focus on sustainability, impact finance, AI governance and digital risk.
- Youth-focused immersion programs that engage high school students and early learners in the foundations of fintech, in partnership with the UN and regional education networks.
- Collectively, these initiatives form the foundation of the new CRAFT Talent Ecosystem, launching in 2026.

3. GROW A DIVERSE AND STRATEGIC PARTNERSHIP NETWORK

CRAFT will continue to expand its consortium of industry and academic partners to enhance research capacity, broaden perspectives, and deepen access to real-world data and domain expertise. Priority efforts include:

- Targeted expansion into insurance, consulting, regtech and digital identity sectors.
- Strengthening collaborations with financial standard setters (e.g., Fed, SEC, CFTC, FASB, XBRL US) and legal/regulatory partners (e.g., Kennedys LLC) to elevate CRAFT's role in policy dialogue and regulatory engagement.
- Developing additional global academic partnerships to increase the diversity of affiliated faculty, research topics and international perspectives.

These partnerships ensure a robust, multidisciplinary ecosystem that supports CRAFT's long-term mission.

4. STRENGTHEN COMMERCIALIZATION AND TECHNOLOGY TRANSFER PATHWAYS

Through the IP/Commercialization Task Force and expanded industry engagement, CRAFT will streamline processes that enable research innovations to move efficiently from concept to market. Key objectives include:

- Developing clear, collaborative IP frameworks that accelerate joint innovation and reduce friction between academic and industry partners.
- Enhancing technology transfer pipelines, from prototype development to licensing, pilot testing and early adoption by industry members.
- Partnering with venture funds, accelerators and corporate R&D labs to support startup incubation and commercialization opportunities based on CRAFT research.
- Creating mechanisms to track, measure, and highlight commercialization outcomes, ensuring transparency, industry alignment and long-term impact.

5. ESTABLISH GLOBAL THOUGHT LEADERSHIP IN FINTECH INNOVATION

CRAFT will continue to serve as a convening platform for the global fintech community by:

- Disseminating new knowledge through workshops, white papers, seminars, practitioner dialogues and the Fintech 2040 Series.
- Advancing research and public discussions around sustainability, impact financing and digital financial integrity through collaborations with the United Nations and international NGOs.
- Strengthening engagement with regulators, including the SEC, Federal Reserve, CFTC, Treasury and global supervisory bodies, through roundtables, policy briefings and collaborative research addressing emerging risks and technological transformations.

These efforts position CRAFT as a trusted voice at the intersection of technology, policy, and financial innovation.

“CRAFT exemplifies the power of collaboration between academia and industry in addressing some of the most pressing challenges at the intersection of technology and finance. As we advance through our fourth year, the integration of new institutions and organizations into CRAFT has created new opportunities to deepen our technical expertise in service of financial innovation. The research emerging from CRAFT, spanning artificial intelligence, quantum computing, blockchain, and climate finance, reflects both the rigor of academic inquiry and the practical needs of industry partners. Our commitment extends beyond research to workforce development, ensuring that the next generation of leaders possesses both technical depth and business acumen. Through partnerships and a growing network of academic affiliates, CRAFT is positioned to drive meaningful impact on critical issues. I am excited for the work ahead as we continue to shape the future of financial technology.”

**- Liad Wagman, Dean of Lally School of Management
Rensselaer Polytechnic Institute**



APPENDIX

APPENDIX A: NSF CRAFT MAJOR EVENTS AND ACTIVITIES

July 2021 – NSF officially funds the “Center for Research toward Advancing Financial Technologies” (CRAFT).

October 2021 – CRAFT has its first IAB meeting/launch event at Stevens.

YEAR 1

March 2022 – CRAFT has its second IAB meeting at RPI.

April 2022 – CRAFT hires an Operations Director, Jesse Lisnow.

June 2022 – The first seven fintech research projects being. They are titled “Causal Inference for Fairness and Explainability in Financial Decisions,” “Explainable Machine Learning for Credit Risk Analytics,” “Fast Quantum Methods for Financial Risk Management,” “High-dimensional Portfolio Design and Optimization using an Explainable Ensemble Learning Framework,” “Predictive Learning from Long Financial Text Documents,” “Risk Mitigation in Cross-Platform Decentralized Finance” and “Risky Business? Deep Dives into DeFi.”

November 2022 – CRAFT hosts the third IAB Meeting at Stevens.

YEAR 2

January 2023 – The deadline for the requests for Proposal of newly submitted research projects was January 31, 2023.

February 2023 – The academic leadership team, along with the industry advisory board conducted review sessions on the newly submitted research proposals. Based on industry interest, proposals from October 2022, along with January 2023, 15 projects were chosen to present at the Spring 2023 IAB Meeting at RPI.

February 2023 – CRAFT organized a Workforce Development Workshop. The workshop consisted of two panel discussions, one led by industry partners from Bank of America, Charles Schwab, CME and Vanguard, the other by students from Stevens and RPI. Through this workshop, the Center gained valuable insights from industry/HR leaders on how CRAFT can best support workforce development, access to talent initiatives and best practices on hiring procedures. The first panel was a discussion with Industry/HR leaders on the “state of the industry.” This centered around topics such as current and changing in-demand skill sets in the finance market, what skills firms are looking for, how CRAFT produces talent firms are interested in, recommendations for fintech courses, hiring challenges, talent development, inflation and costs, factors driving workforce compensation, student recommendations etc. Participants included Dax Hill, Senior Innovation Manager, Vanguard, Eric Leininger, Executive Director, Financial Research & Product Development, CME Group (moderator) and Krupakar Pasupuleti, Tech Executive, Cloud Development and Enablement, Bank of America. The second panel was a “fireside chat” between industry/HR leaders and four students from Stevens and RPI. Students led the discussion and asked questions based on career trajectory perspectives. This included items such as job fairs, the hiring process, desirable resume characters, best practices to secure a position, the interview process, how to stand out amongst competition, valuable courses or academic experience, extracurricular activities, advice on becoming a fintech innovator, etc. Students included Noah Porcelain, Stevens undergraduate student, Agathe Sadeghi, Stevens Ph.D. student. Cole Paquin, RPI M.S. student and Pierce Phillips, RPI M.S. student. Industry participants included Dax Hill, Senior Innovation

Manager, Vanguard, Eric Brubaker, Senior Manager R&D, and Charles Schwab. Eric Leininger, Executive Director, Financial Research & Product Development, CME Group and Mike Purewal, Data Scientist, Bank of America. The workshop concluded with a presentation on the Hanlon Financial Systems Center laboratory, a staple of the finance program at Stevens, a presentation by the SSIMF (Stevens Student Managed Investment Fund) program at Stevens and a reception.

March 2023 – The third Industry Advisory Board Meeting was held at RPI. The meeting featured an introduction to CRAFT and the industry-university cooperative research center model Keynotes: “Fintech Venture Capital and Start-up Ecosystem” and “Fraud and Anomalies Detection in Financial Service,” a panel discussion on the commercialization of fintech innovations, an academic presentation by the University of Connecticut and 15 leading-edge research project proposals. Day 2 of the meeting featured a successful administrative session with the IAB where the “pre-proposal lightning rounds” were discussed as a pre-filtering proposal step. The IAB voted to fund five projects starting on June 1, 2023. During the session, Bank of America suggested the next IAB meeting at their Bryant Park campus in New York City.

June 2023 - Four currently funded CRAFT projects began on June 1, 2023. They include “Blockchain Interoperability for Business Organizations” PI: Oshani Seneviratne (RPI), “Efficient, Private, and Explainable Federated Learning for Financial Crime Detection” PI: Stacy Patterson (RPI), “Extending, Simulating and Scaling Decentralized Exchanges Made by Automated Market Makers” PI: Zachary Feinstein (Stevens), “Systemic Risk Implications of Central Bank Digital Currencies” PI: Zachary Feinstein (Stevens).

July 2023 - CRAFT implemented every-other-month “CRAFT Cadence Calls” between CRAFT leadership, ALT and IAB members. This acts as a Center update and a touch point for on-going discussion items.

September 2023 – CRAFT’s first funded “ignition grants” present their findings at the annual CRAFT Reception Event.

November 2023 – CRAFT held its fourth biannual Industry Advisory Board Meeting early in the month at Bank of America. This is the first time an IAB meeting was held at an Industry member location. This collaboration between RPI/Stevens/BoA proved to be greatly beneficial as many long-lasting relationships were solidified and the centralized location of Bank of America’s Bryant Park campus was very convenient for most attendees.

December 2023 – CRAFT visited the United Nations to attend the first ever “Interuniversity Conference on Youth and Education” with presenters from around the world and continued conversation on launching the UN-subcommittee on green finance initiatives.

YEAR 3

January 2024 - The CRAFT Center acquires an entire wing of the Stevens School of Business to conduct operations.

January 2024 – 13 pre-proposals submitted and lightning rounds are held.

February 2024 - CRAFT and CO-WY Climate Resilience Engine sign an MOU and enter into a collaborative partnership to combat climate change.

March 2024 - The Center creates a firewall proof online directory or repository that houses all center-generated materials that the IAB members can access at home or work.

March 2024 - Sixth IAB Meeting held at RPI Campus with 7 projects presented.

March-April 2024 - Two inventions are disclosed to technology transfer offices in a first of its kind initiative to possibly patent center generated ideas.

April 2024 - CRAFT adds “Industry Testimonials” to the website.

June 2024 - Five new research projects are started.

June 2024 - The newly formed CRAFT IP/Commercialization Task Force begins its monthly meetings.

September 2024 - CRAFT hosts its annual September reception event at Stevens.

October 2024 - CRAFT manages the CIFEr 2024 Conference at Stevens.

October 2024 - CRAFT hosts the Fall 2024 Industry Advisory Board Meeting at Stevens with attendees from CIFEr 2024.

October 2024 - CRAFT hosts the seventh Industry Advisory Board Meeting at Stevens.

November 2024 - CRAFT creates the “affiliate academic member” membership option which expedites participation from other Universities, both international and domestic.

December 2024 - CRAFT has formal meetings with United Nations Association of El Salvador (UNA-SV) and The Organization for Poverty Alleviation and Development (OPAD) at the United Nations to discuss and solidify the partnership and makes plans for a formal announcement at a February 2025 event at the UN. CRAFT will participate in the UNs “Knowledge Innovation Summit” poised for Spring 2026.

December 2024 - CRAFT continuously provides support and guidance for the Stevens/CRAFT Fintech Certification Program, in which CRAFT members will be the first to receive discounts on their enrollment in the program.

YEAR 4

January 2025 - Call for Pre-proposals is sent to CRAFT affiliated faculty.

February 2025 - The University of Connecticut officially joins CRAFT as the first “affiliate academic member.”

March 2025 - CRAFT hosts its eighth Industry Advisory Board meeting at RPI. Five projects are selected for funding.

May 2025 - Newly formed bylaws on “follow-on” research are established and voted on after IP/Commercialization task force discussions.

May 2025 - Prudential officially joins CRAFT as a full member.

June 2025 - CRAFT hosts the “Fintech in 2040” workshop at Bank of America – the first of CRAFT’s workshops to be hosted by an Industry Partner.

September 2025 - CRAFT conducts its first “road show” at Bank of America HQ in NYC. Over 100 people are in attendance.

October 2025 - CRAFT hosts its ninth Industry Advisory Board meeting at Stevens. Four projects are selected for funding. Northeastern University and Stony Brook University present.

November 2025 - CRAFT conducts preliminary meetings to plan the INFORMS 2026 Conference at Stevens.