

BENEFITS OF MEMBERSHIP



The future of fintech is here, thanks to the Center for Research toward Advancing Financial Technologies (CRAFT), a partnership between the National Science Foundation, Stevens Institute of Technology and Rensselaer Polytechnic Institute. CRAFT is the first Industry/University Cooperative Research Center (I/UCRC) focused on Financial Sciences and Technologies sponsored and operationally funded by the NSF for a period of up to 10 years. It is designed to serve as a platform for industry and university collaboration.

CRAFT Membership Levels

There are four levels of membership. Full members receive one full vote on project proposals, royalty-free access to all CRAFT-funded IP and a seat on the Industry Advisory Board.

Full Membership – \$50,000

- 1 full vote on projects to fund
- Royalty-free access to all center funded IP
- Membership on the Industry Advisory Board

Associate Membership – \$25,000

- 1 half vote on projects to fund
- Royalty-free access to all center funded IP
- Membership on the Industry Advisory Board

Affiliate Membership – \$5,000

- No vote on projects to fund
- Observer Status in Industry Advisory Board Meetings (not a voting member)

Government Membership - No Fee

- No vote on projects to fund
- Observer Status in Industry Advisory Board Meetings (not a voting member)



“We’re not just looking at specific technologies like AI, blockchain or quantum computing. We want to address related issues: ethics, law regulation, governance and policy issues so that we have a holistic approach in product development and service innovation. All fintech innovations should provide better accountability, privacy and social responsibility.”

Steve Yang, CRAFT Director

WHY AN IUCRC MODEL?



By participating in an Industry-University Cooperative Research Center like CRAFT, financial companies can leverage groundbreaking research and talent to tackle complex issues no single firm could address alone. With the proper cooperative efforts between industry leaders and academic powerhouses, the financial sector can adopt new technologies and strategies to enhance security, efficiency, and customer service. Combining strengths, expertise and resources across the private and public sectors will be the key to overcoming current and future obstacles.

IUCRCs connect corporate partners and government agencies with academic researchers in service of three primary objectives:



Conduct high-impact research to meet shared industrial needs



Enhance U.S. global leadership in driving innovative technology development



Identify, mentor and develop a diverse high-tech, exceptionally skilled workforce

INDUSTRY BENEFITS

- Access to knowledge, facilities, equipment and intellectual property in a highly cost-efficient model
- Ability to leverage Center research outcomes in future proprietary projects
- Interact in an informal, collaborative way with other private sector and government entities with shared interests
- Identify and recruit talent

THE ADVANTAGES OF “DE-RISKING”

Participating in an IUCRC allows companies to partake in research that is too difficult or resource-intensive to justify on an internal level. For example, developing quantum computing applications for portfolio optimization would require significant investment without guaranteed returns. By joining CRAFT, companies can access top talent and infrastructure without bearing the full research burden. Ultimately, IUCRCs enable the financial industry to explore innovative but unproven solutions in a collaborative setting that shares the risks and rewards.

ACCESSING THE TALENT PIPELINE



By becoming a member of CRAFT, you'll have direct access to the brightest graduate and undergraduate students at our member universities. Participating companies can mentor, train and develop high-potential students and assess their skills for recruitment. CRAFT creates a talent pipeline between academia and the financial industry that drives fresh thinking and ensures companies have the right skills for the future.

Students from CRAFT universities are now working for:

- Barclays (Investment Bank Rates Analyst)
- Goldman Sachs (Analysts, Controllers Division)
- Johnson & Johnson (Business Data Analysts)
- KPMG (Advisory Associate)
- Bloomberg (Financial Analyst)
- UBS (Python Automation Solutions Developer)
- Accenture (Platform Advisory Analyst)
- Deutsche Bank (Technology Analyst)
- PwC (Financial Modeling Analytics Associate)
- Wells Fargo (Risk Associate)
- Deloitte (Risk and Financial Advisory Analyst)
- Intercontinental Exchange, Inc. (Trade Surveillance Development Analyst)
- AVM L.P. (Quantitative Developer)
- Prudential Financial (Director of Investment Operations)

CRAFT university students come equipped with technical skills such as:

- ⚙️ Bloomberg Terminal
- ⚙️ Python
- ⚙️ STATA
- ⚙️ SQL
- ⚙️ Tableau
- ⚙️ SAS
- ⚙️ C++
- ⚙️ R



“Just as the financial exchanges have been transformed by automation in the last 20 years, new technologies will reshape the banking and insurance sectors. The mission of CRAFT is to help our industry members prepare and stay ahead of this trend, and allow for a smoother transition to new business models and infrastructures.”

George Calhoun, CRAFT Managing Director

DEFINING THE RESEARCH AGENDA



Having a “seat at the table” may be the most important benefit of CRAFT membership. Remaining competitive in the financial industry requires not just adopting new technologies, but shaping their development to drive maximum value. This makes active engagement with academic research a strategic imperative. As members of CRAFT, companies can directly influence the direction of emerging innovations to align with their specific needs.



Full and Associate CRAFT members vote on all research projects and recommend funding priorities to ensure that funded research is relevant to current industry challenges.



The NSF’s specified mission for CRAFT is to become a center of thought leadership and policy guidance for the industry as a whole and for regulators and government agencies developing policies to cope with technological change in the financial sector. CRAFT is a forum for industry members to enhance their influence over these policies.



Many CRAFT members engage their own personnel directly in projects of specific interest to them, and play a more active role in guiding the research process.



By helping set CRAFT’s research agenda, companies in the financial sector can:

- Prioritize the most relevant technological breakthroughs
- Propel advances in data analytics, AI, blockchain, quantum computing, etc.
- Proactively steer progress down avenues that enhance services and operations.
- Help ensure new technologies are tailored for impact from the start
- Build strategic partnerships to unlock innovations that provide real-world solutions

As a CRAFT member, you will be invited to participate in workshops that provide critical opportunities for leaders across the financial sector to engage on the most pressing issues facing the industry. Regularly convening the brightest minds across financial domains fosters innovation and creates standards that promote stability and growth industry-wide.

Quantum Computing in Finance

Led by Elena Yndurain, a technology strategist specialized in launching emerging technologies into the market, linking R&D to business applicability, the workshop was an overview and discussion of what quantum computing is, the current state of the art, and what are the potential use cases for the finance industry. The two sessions cover:

- Quantum computing overview/concept
- Quantum computing general applicability
- Development environment
- Preparing for quantum
- Use cases
- Providers
- Ecosystem
- Technology stack



Central Bank Digital Currency (CBDC)

The workshop was an overview and discussion of the CBDC System Governance and Policies, Infrastructure Design and Interoperability, and Liquidity and Systemic Risk. The two-session workshop included both industry and faculty presentations. Session 1 included CBDC System Governance and Policies with use cases and development with presentations by SWIFT, Government Blockchain Association, IBM and Capgemini.

The second session was dedicated to Infrastructure Design, Interoperability, Liquidity and Systemic Risk with presentations by Dr. Yeganeh Hayeri, a faculty member of the School of Systems and Enterprises at Stevens Institute of Technology, Oshani Seneviratne, associate director of the Tetherless World Constellation at Rensselaer Polytechnic Institute and an assistant professor in computer science, and Dr. Zachary Feinstein, an assistant professor at Stevens Institute of Technology School of Business.



Workforce Development

This discussion focused on career growth strategies and the hiring practices of fintech leaders to gain 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 workshop consisted of two panel discussions, one led by industry, the other by students from Stevens and RPI. Panelists included CRAFT's industry partners from Bank of America, Charles Schwab, CME and Vanguard.



“Our students get relevant, compelling research projects to work on. And, of course, industry members get strong talent.”

Aparna Gupta, CRAFT Co-Director



THE FINANCIAL ADVANTAGES



Joining CRAFT provides significant financial benefits to partners in the financial sector. Membership fees grant access to cutting-edge facilities and faculty expertise at a fraction of the cost of internal R&D. Research costs are also distributed across participating industry members, minimizing the investment risk for individual firms.



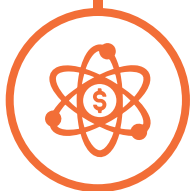
Research Leverage

The structure of the NSF model means each member has access to ALL the funded research. According to the NSF, the ratio of the value of the funded research to the individual firm's membership fee is more than 40-to-1 in established centers of this kind.



Royalty-Free Access

CRAFT members have a gateway to all technology and intellectual property resulting from CRAFT research. Industry members enjoy a nonexclusive, royalty-free license to the fruits of the research program.



Favorable Overhead

Under NSF rules, overhead on research is strictly limited. At least 90% of the membership fee must be applied to the research directly, a much higher rate than the typical traditional sponsored research project.



“Unique partnerships between universities, government, & industry will be crucial to advancing technologies to meet the challenges we have ahead of us.”

Martin Schmidt, President, RPI

CURRENT CRAFT MEMBERS



CRAFT currently has **14** full/associate industry members, **6** affiliated members.

CRAFT seeks to engage with Governmental/Regulatory Agencies as Affiliate (in-kind) members for critically valuable advisory and policy guidance.

FULL MEMBERS

BANK OF AMERICA 

BofA SECURITIES 

IBM

 **CME Group**

Capgemini 

 **Elevance Health**

WELLS FARGO

charles SCHWAB



ASSOCIATE MEMBERS

 **PARK AVENUE FINANCE**

 **Goldman Sachs**

 **UBS**

Vanguard

Kennedys iQ

AFFILIATE MEMBERS

ALTONOMY

 **GBA**

4THOUGHT
TECHNOLOGIES

BALCONY