

# The Center for Research toward Advancing Financial Technologies

## Industry Advisory Board Meeting

March 24-25, 2022



# Overview

This meeting is jointly hosted by Rensselaer Polytechnic Institute and Stevens Institute of Technology. The Center for Research toward Advancing Financial Technologies (CRAFT) is an industry-university cooperative research center funded by the National Science Foundation.

## Featuring:

- An introduction to CRAFT and the industry-university cooperative research center model.
- Keynotes: “Regulatory Compliance and Cloud-based Digital Transformations in Financial Services Enterprises” and “Metaverse in Financial Services.”
- Cutting-edge fintech research project presentations.
- Panel discussion on fintech challenges and opportunities in insurance.

## This event will be hosted in a hybrid format.

- Virtual attendees should register via [Webex](#) and join based on the instructions provided after registration.
- In-person attendees should report to the Howard P. Isermann '42 Auditorium in the Center for Biotechnology and Interdisciplinary Studies at Rensselaer Polytechnic Institute. For directions, view the [campus map](#).

# Agenda — March 24, 2022

7:30-8:30 a.m.	REGISTRATION, BREAKFAST, AND NETWORKING
8:30-9:00 a.m.	<p>WELCOME FROM RENSSELAER POLYTECHNIC INSTITUTE (RPI) AND STEVENS INSTITUTE OF TECHNOLOGY</p> <ul style="list-style-type: none"> <li>8:30-8:40 a.m. CRAFT co-director and workshop chair and director's welcome</li> </ul> <p>WELCOME ADDRESSES FROM UNIVERSITY LEADERSHIP:</p> <ul style="list-style-type: none"> <li>8:40-8:55 a.m. Rensselaer provost, vice president of research, and dean of the Lally School of Management</li> <li>8:55-9:00 a.m. Stevens dean of the School of Business</li> </ul>
9:00-9:15 a.m.	VISION, CAPABILITIES, AND VALUE PROPOSITION OF CRAFT — <i>CRAFT DIRECTOR AND CO-DIRECTOR</i>
9:15-10:00 a.m.	NSF PRESENTATION ON THE I/UCRC MODEL — <i>NSF PROGRAM DIRECTOR AND EVALUATOR</i>
10:00-10:30 a.m.	"SHOWCASING PROSPECTIVE UNIVERSITY PARTNERS" — <i>PANKAJ K. JAIN, UNIVERSITY OF MEMPHIS</i>
10:30-10:45 a.m.	Coffee break
10:45-11:15 a.m.	<p>KEYNOTE: "REGULATORY COMPLIANCE AND CLOUD-BASED DIGITAL TRANSFORMATIONS IN FINANCIAL SERVICES ENTERPRISES" — <i>MR. KIRAN PANJA, MANAGING DIRECTOR, FINANCIAL SERVICES DIGITAL TRANSFORMATION, IBM CLOUD, IBM</i></p> <p>Chair — Steve Yang</p>
11:15-12:30 p.m.	<p>PROJECT PROPOSAL PRESENTATIONS</p> <p>Chair — Steve Yang</p> <p>PROJECTS THEME: "EXPLAINABLE AI AND FAIRNESS"</p> <ol style="list-style-type: none"> <li>"Explainable AI with Attention Networks for Credit/Load Decisions," <i>PI: S.P. Subbalakshmi (Stevens)</i></li> <li>"Causal Inference for Fairness and Explainability in Financial Decisions," <i>PI: Jia Xu (Stevens)</i></li> <li>"Fairness-Aware Explainable Recommender Systems," <i>PI: Wendy Hui Wang (Stevens)</i></li> <li>"Explainable Machine Learning for Credit Risk Analytics," <i>PI: Brian Clark (RPI)</i></li> <li>"High-dimensional Portfolio Design and Optimization Using an Explainable Ensemble Learning Framework," <i>PI: Lydia Manikonda (RPI)</i></li> </ol>

# Agenda

12:30-1:30 p.m.	LUNCH
1:30-2:00 p.m.	KEYNOTE: “METAVERSE IN FINANCIAL SERVICES” — MR. SUDHIR PAI, EXECUTIVE VICE PRESIDENT AND CTIO, FINANCIAL SERVICES SBU, CAPGEMINI Chair — Aparna Gupta
2:00-3:15 p.m.	PROJECT PROPOSAL PRESENTATIONS Chair — Aparna Gupta PROJECTS THEME: “NOVEL DATA PARADIGMS FOR FINANCIAL DECISIONS” 1. “Predictive Learning from Long Financial Text Documents,” <i>PI: Mohammed Zaki (RPI)</i> 2. “Dynamic Asset-liability Management with Immunization,” <i>PI: Darinka Dentcheva (Stevens)</i> 3. “AI-Driven Early Estimates of State for Predictive Robust Portfolio Allocation,” <i>PI: Malik Magdon-Ismail (RPI)</i> 4. “Reducing Information Asymmetry in Business Processes through Blockchain and IoT,” <i>PI: Jianjing Lin (RPI)</i>
3:15-3:30 p.m.	COFFEE BREAK
3:30-4:45 p.m.	PROJECT PROPOSAL PRESENTATIONS Chair — Koushik Kar PROJECTS THEME: “FRONTIERS IN RISK CHALLENGES” 1. “Risky Business? Deep Dives into DeFi,” <i>PI: Kristin Bennett (RPI)</i> 2. “Risk Mitigation in Cross-Platform Decentralized Finance,” <i>PI: Oshani Seneviratne (RPI)</i> 3. “Fast Quantum Methods for Financial Risk Management,” <i>PI: Z. Cui (Stevens)</i> 4. “Data-driven Financial Decision Making in Climate-change-induced Flooding,” <i>PI: F. Pajouh (Stevens)</i> 5. “SHIFT a Testbed for Risk Assessment and Regulatory Compliance,” <i>PI: Ionut Florescu (Stevens)</i>
4:45-5:30 p.m.	PANEL DISCUSSION: “FINTECH CHALLENGES AND OPPORTUNITIES IN INSURANCE” Featuring panelists from Anthem, Capgemini, Cambridge Mobile Telematics, and Zelros.

# Agenda

5:30-5:45 p.m.	REVIEW OF THE DAY AND NEXT-DAY PROGRAM OVERVIEW
6:30 p.m.	RECEPTION AND DINNER AT HILTON

## March 25, 2022

Note: Day 2 is only open to the CRAFT Industry Advisory Board members, the CRAFT Academic Leadership Team (ALT), and the NSF Program Director and Evaluator.

7:30-8:30 a.m.	BREAKFAST AND NETWORKING
8:30-9:15 a.m.	CRAFT IAB ADMINISTRATIVE MATTERS — <i>CRAFT DIRECTOR AND CO-DIRECTORS</i>
9:15-10:45 a.m.	FEEDBACK FROM INDUSTRY PARTICIPANTS ON PROJECTS (VOTING) — <i>IAB CHAIR MODERATES</i>
10:45-11:00 a.m.	COFFEE BREAK
11:00-11:30 p.m.	NSF CLOSED SESSION WITH INDUSTRY
11:30-12:00 p.m.	IAB CHAIR AND VICE CHAIR REPORT OUT TO CRAFT ALT
12:00-12:30 p.m.	NEXT STEPS, ACTION ITEMS, AND CLOSING REMARKS
12:30-2:00 p.m.	LUNCH AND NETWORKING
2:00 p.m.	ADJOURN

# Center Director Bios



## **Dr. Aparna Gupta**

**Workshop Chair and Co-Director, CRAFT  
Professor of Quantitative Finance, Lally School of Management, RPI**

Dr. Aparna Gupta has developed and taught courses in financial engineering and quantitative methods in finance at the undergraduate and graduate levels at Rensselaer Polytechnic Institute. She also teaches short courses in quantitative finance in the Lally School of Management's international initiatives. Dr. Gupta's research interest is addressing issues in risk management at the individual and the institutional level. She serves as the vice chair of the INFORMS Financial Services Section. Dr. Gupta is a member of IAFE, AFA, INFORMS, and SIAM. She has an M.S. and a Ph.D. from Stanford University.



## **Dr. Steve Yang**

**Workshop Co-Chair and Director, CRAFT  
Associate Professor, School of Business, Stevens Institute of Technology**

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. He holds a B.S. degree in aerospace engineering from the Beijing Institute of Aeronautics and Astronautics and a Ph.D. in systems and information engineering from University of Virginia with concentration in financial engineering.

# Center Director Bios



## Dr. George Calhoun

**Managing Director, Hanlon Financial Systems Center  
Teaching Professor, Stevens Institute of Technology**

Dr. George Calhoun is a cofounder 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.

# Keynote Speaker Bios



## Mr. Kiran Panja

**Managing Director, Financial Services Digital Transformation, IBM Cloud, IBM  
Keynote: "Regulatory Compliance and Cloud-based Digital Transformations in Financial Services Enterprises"**

Kiran Panja is a managing director at IBM, responsible for IBM Cloud offerings that serve banking, financial markets, and insurance sectors in the North America region. Leveraging his experience in successfully driving digital and cloud transformations at large global financial services organizations, Panja acts a valued advisor to the C-suite for emerging cloud technology adoption, implementation, and operations strategies.

Prior to joining IBM in late-2020, Panja served as Citigroup's global head of cloud and digital platforms for the consumer banking line of business, where he successfully evolved the company's cloud capabilities and helped the consumer bank accelerate its journey to become a leading global digital bank. In addition to his Citigroup tenure, Panja has held several leadership and transformational roles in technology, engineering, and IT executive management at JPMorgan Chase, Qwest Communications (now CenturyLink), and CheckFree (now Fiserv). He has a master's degree in mathematics and computer science.

# Keynote Speaker Bios



## Mr. Sudhir Pai

**Executive Vice President, CTIO, Financial Services SBU, Capgemini**  
**Keynote: “Metaverse in Financial Services”**

Sudhir Pai is an EVP and chief technology and innovation officer (CTIO) for the global financial services business at Capgemini. He is a thought leader, speaker, blogger, and business advisor for CXOs in the finance industry. He has published over 100 blogs since last year and has been praised for being practical, relevant, actionable, and hands-on. As an advisor, he is focusing on sparking innovation, embracing ecosystem for significant business impacts, and assisting organizations to face technology disruptions. He has been elected as a fellow for developing a fintech and blockchain ecosystem at Singapore Institute of Management and serves as a board member for Innovation Precinct at the University of Swinburne. He is a start-up advisor and mentor at Zone Start-up hub Mumbai, T-Hub in Hyderabad, and Startupbootcamp in Melbourne. Pai believes in continuous learning and recently completed his studies around AI for business strategy at MIT. He has tremendous passion for blockchain and distributed ledger technologies. He was a keynote speaker at SIBOS and at IDC Singapore events and his presentations “Beyond Banking” and “Bank as an Ecosystem” resonated extremely well with industry leaders and CXOs.

As a CTIO, Pai is currently responsible for:

- Developing connected ecosystems of start-ups, fintechs, universities, regulators, and the government to serve future business needs.
- Proactively investing in disruptive technology solutions, primarily in the areas of customer experience and operational efficiencies.
- Developing new business models to open up additional channels of revenue through innovative ideas and cross industry connects.

Above all, Pai is constantly driving an innovation agenda for clients through Capgemini’s Applied Innovation Exchange program, co-creating solutions that can be scaled for enterprise needs. Previously CTO for Capgemini’s Australia business, he pioneered setting up a SMAC (Social, Mobile, Analytics and Cloud) lab, building market presence in disruptive technologies. He has over 22 years of global IT service industry experience, working in diverse technology, delivery, and engagement roles. He has served global clients from the U.S., U.K., Japan, Middle East, India, and Australia.



# Project Principal Investigators — Theme: “Explainable AI and Fairness”

Chair: Dr. Steve Yang



## Dr. K.P. Subbalakshmi

**Founding Director, Stevens Institute of AI**

**Professor, Department of Electrical and Computer Engineering, Stevens Institute of Technology**

**Project: “Explainable AI with Attention Networks for Credit/Load Decisions”**

Dr. K.P. (Suba) Subbalakshmi is a fellow of the National Academy of Inventors and a Jefferson Science Fellow. She is a member of the National Academy of Sciences Engineering and Medicine’s Intelligence Science and Technology Experts Group (ISTEG). She is a recipient of the New Jersey Inventors Hall of Fame Innovator Award. Dr. Suba has an M.E in electrical communication engineering from the Indian Institute of Science, Bangalore, and a Ph.D. from Simon Fraser University.



## Dr. Jia Xu

**Assistant Professor of Computer Science, Stevens Institute of Technology**

**Project: “Causal Inference for Fairness and Explainability in Financial Decisions”**

Dr. Jia Xu’s current research interests are in machine learning, with a focus on highly competitive machine translation systems. She is publishing in mainstream venues in computational linguistics and machine learning (e.g., AACL, ICML, ACL). Dr. Xu has a Ph.D. from RWTH-Aachen University.

# Project Principal Investigators — Theme: “Explainable AI and Fairness”

Chair: Dr. Steve Yang



## Dr. Wendy Hui Wang

**Associate Professor of Computer Science, Stevens Institute of Technology**

**Project: “Fairness-Aware Explainable Recommender Systems”**

Dr. Wendy Hui Wang received her Ph.D. from the University of British Columbia, Vancouver, Canada. Her research interests lie in database management and data mining in general, with a particular focus on database security and data privacy. She was awarded an NSF CAREER award in 2014 for her research in verifiable computations in cloud computing.



## Dr. Brian Clark

**Assistant Professor, Lally School of Management, RPI**

**Project: “Explainable Machine Learning for Credit Risk Analytics”**

Dr. Brian Clark’s research focuses on financial intermediation and risk management with an emphasis on machine learning. His research has been published in the *Journal of Banking and Finance*, *Journal of Financial Stability*, *Quantitative Finance*, and *Operations Research Letters*. He has been quoted in *U.S. News & World Report*, the *Times Union*, and WalletHub. Dr. Clark has a Ph.D. in finance from RPI.

# Project Principal Investigators — Theme: “Explainable AI and Fairness”

Chair: Dr. Steve Yang



## Dr. Lydia Manikonda

**Assistant Professor, Lally School of Management, RPI**

**Project: “High-dimensional Portfolio Design and Optimization Using an Explainable Ensemble Learning Framework”**

Dr. Lydia Manikonda is also affiliated with the AIRC at RPI. Her passion is to build intelligent decision-making models that are capable of learning and reasoning. So far, her research work has received several media mentions, a best reviewer award at ICWSM 2016, and an outstanding demonstration award at ICAPS 2014. Dr. Manikonda received her Ph.D. in computer science from Arizona State University in 2019.

# Project Principal Investigators — Theme: “Novel Data Paradigms for Financial Decisions”

Chair: Dr. Aparna Gupta



## Dr. Mohammed Zaki

**Professor of Computer Science, RPI**

**Project: “Predictive Learning from Long Financial Text Documents”**

Dr. Mohammed J. Zaki’s research interests focus on developing novel data mining and machine learning techniques, especially for applications in text mining, social networks, bioinformatics, and personal health. He has over 250 publications (and 6 patents), including the *Data Mining and Machine Learning* textbook. His research is supported in part by NSF, DARPA, NIH, DOE, IBM, Google, HP, and Nvidia. He received his Ph.D. degree in computer science from the University of Rochester.

# Project Principal Investigators — Theme: “Novel Data Paradigms for Financial Decisions”

Chair: Dr. Aparna Gupta



## **Dr. Darinka Dentcheva**

**Professor of Mathematical Sciences, Stevens Institute of Technology**  
**Project: “Dynamic Asset-liability Management with Immunization”**

Dr. Darinka Dentcheva is a Bulgarian-American mathematician, noted for her contributions to convex analysis, stochastic programming, and risk-averse optimization. Dr. Dentcheva was born in Bulgaria. She received her M.S. and Ph.D. degrees in mathematics from Humboldt University of Berlin (Germany) in 1981 and 1989, respectively. She authored two books and more than 70 research papers.



## **Dr. Malik Magdon-Ismail**

**Professor of Computer Science, RPI**  
**Project: “AI-Driven Early Estimates of State for Predictive Robust Portfolio Allocation”**

Dr. Malik Magdon-Ismail has degrees from Yale and Caltech. His research interests are in decision-making from data in complex systems, including machine learning, computational finance, and social and communication networks.

# Project Principal Investigators — Theme: “Novel Data Paradigms for Financial Decisions”

Chair: Dr. Aparna Gupta



## Dr. Jianjing Lin

**Assistant Professor of Economics, RPI**

**Project: “Reducing Information Asymmetry in Business Processes through Blockchain and IoT”**

Dr. Jianjing Lin’s research interests include topics in health economics, industrial organization, and applied econometrics. She is currently focused on issues related to health information technology (IT) adoption, as well as health IT impacts on hospital financial and quality performance.

# Project Principal Investigators — Theme: “Frontiers in Risk Challenges”

Chair: Dr. Koushik Kar



## Dr. Koushik Kar

**Professor of Electrical, Computer, and Systems Engineering, RPI**

Dr. Koushik Kar held visiting research positions at Bell Laboratories, New Jersey, and IBM TJ Watson Research Center in New York. His core specialization is in control and optimization of networks and networked systems, with a special focus on communication networks and energy flow networks. He obtained a B.Tech in electrical engineering from the Indian Institute of Technology, Kanpur, and a Ph.D. degree in electrical and computer engineering from the University of Maryland, College Park.

# Project Principal Investigators — Theme: “Frontiers in Risk Challenges”

Chair: Dr. Koushik Kar



## Dr. Kristin Bennett

**Professor of Mathematical Sciences, RPI**

**Project: “Risky Business? Deep Dives into DeFi”**

Dr. Kristin Bennett brings over 30 years of research experience in artificial intelligence, machine learning, and their applications to problems in health, science, and industry. She has been PI or co-PI on many data science research projects funded by GE (PI), Global Foundries (co-PI), Albany Capital District Physicians’ Health Plan (HMO, PI), IBM (co-PI), United Health Foundation/OPTUM Labs (PI), etc. She has over 130 research publications and has a Ph.D. from the University of Wisconsin, Madison.



## Dr. Oshani Seneviratne

**Director of Health Data Research, RPI**

**Project: “Risk Mitigation in Cross-Platform Decentralized Finance”**

Dr. Oshani Seneviratne’s research interests span data integration in knowledge graphs, artificial intelligence, accountable and decentralized systems, including web and blockchain technologies. Dr. Seneviratne has published over 50 articles in these research areas and won the Yahoo! Key Scientific Challenge Award for her dissertation work at Oracle. Dr. Seneviratne obtained her Ph.D. in computer science from Massachusetts Institute of Technology in 2014 under the supervision of Sir Tim Berners-Lee, the inventor of the World Wide Web.

# Project Principal Investigators — Theme: “Frontiers in Risk Challenges”

Chair: Dr. Koushik Kar



## Dr. Zhenyu Cui

**Assistant Professor of Financial Engineering, School of Business, Stevens Institute of Technology**  
**Project: “Fast Quantum Methods for Financial Risk Management”**

Dr. Zhenyu Cui’s research interests lie in financial engineering, insurance analytics, and operations research. He is member of the Society of Actuaries and the Society of Financial Econometrics. Dr. Cui holds a B.S. (with first-class honors) in actuarial science from the University of Hong Kong, a master’s in quantitative finance, and a Ph.D. in statistics from the University of Waterloo.



## Dr. Foad Pajouh

**Associate Professor, Stevens Institute of Technology**  
**Project: “Data-driven Financial Decision Making in Climate-change-induced Flooding”**

Dr. Foad Pajouh is a Google scholar with areas of research including theoretical, computational, and algorithmic optimization; and big data analytics of complex networks with applications in business analytics, social network analysis, financial network analysis, and cybersecurity. He serves as an associate editor for the *Journal of Combinatorial Optimization*. Dr. Pajouh has a Ph.D. in industrial engineering and management from Oklahoma State University and an M.S. in industrial engineering from Tarbiat Modares University.

# Project Principal Investigators — Theme: “Frontiers in Risk Challenges”

Chair: Dr. Koushik Kar



## Dr. Ionut Florescu

**Research Professor of Financial Engineering, School of Business, Stevens Institute of Technology**  
**Project: “SHIFT a Testbed for Risk Assessment and Regulatory Compliance”**

Dr. Ionut Florescu serves as director of the financial analytics program, and director of the Hanlon Financial Systems Lab at Stevens. His research interest is concentrated primarily in the area of stochastic processes and applications to finance. His education includes a bachelor’s in mathematics (1996) and a master’s in stochastic processes (1997) from the University of Bucharest, Romania, as well as a master’s in computational finance (Dec. 2001) from Purdue University.

# Panelists: “Fintech Challenges and Opportunities in Insurance”



## Andrew Hood

**Vice President, Insurance Practice Head, Capgemini**

Andrew Hood is a vice president within Capgemini’s Financial Services Business Unit (FSBU) and the insurance practice leader for North America. He has over 20 years of experience in strategy, technology, and management consulting, particularly within the P&C insurance sector. He has worked with clients in the U.K., Europe, North America, and the Asia-Pacific region. He has finely honed analytical and program management skills. These skills have been developed and refined over a number of assignments that have resulted in the definition and rapid implementation of solutions for complex problems across the insurance value chain multi-channel distribution, policy administration, and claims management. He is one of the few people who has worked across the entire financial services consulting continuum — from strategy development, solution design, and program management to development, implementation, and managed services.



# Panelists: “Fintech Challenges and Opportunities in Insurance”



## Atul Apte

### Staff VP Technology, Anthem

Atul Apte has over 30 years of leadership and experience in developing new and transformative systems across health care, high-tech, retail, logistics, telecommunications, banking, and finance industries. He has a proven track record of delivering innovative and breakthrough business solutions across diverse and multi-cultural Fortune 100 and global companies. Through his current work at Anthem, Inc., and with previous roles at global companies like DHL Worldwide Express, Dow Jones Telerate, and Citibank, he has gained practical knowledge of dynamic team building and effective people management, while guiding technology-driven and enterprise-level transformation of complex cross-functional value systems.



## Damien Philippon

### Founder, COO, Zelros

Damien Philippon spent the first 10 years of his career building a strong technical IT background at a leading systems integrator. Philippon started as an entrepreneur 15 years ago, cofounding first a management consulting company and then Zelros. Zelros aims at turning insurance into the most customer-centric industry thanks to data and AI. Decently and fairly insuring 8 billion humans in a difficult environment with natural disasters, pandemics, and wars is a big challenge. Zelros wants to help make sure each and every person’s life is properly protected. Philippon lived in France, in India, and now lives in Canada. He loves cultural differences and believes in collective intelligence.

# Panelists: “Fintech Challenges and Opportunities in Insurance”



## **Sharon Gadonniex**

### **EVP, Engineering Development, Cambridge Mobile Telematics**

Sharon Gadonniex is the EVP of engineering development and data science at Cambridge Mobile Telematics (CMT), the world’s largest telematics provider. She comes to CMT from the consumer electronics industry, bringing 30 years of experience leading algorithm, data science, and engineering teams from initial idea to quality product launch. At CMT, Gadonniex leads a team of more than 160 technologists with expertise across a broad range of topics, including data science, business analytics, machine learning, highly scalable cloud infrastructure, and mobile development. She is passionate about customers, innovation, and engineering excellence, and especially enjoys helping others grow and develop into the next generation of technologists and leaders. Gadonniex has a BSEE from MIT, a MSEE from UMASS Amherst, and holds a number of patents from her work on voice cognition, audio processing, and ultrasound imaging.



## About Rensselaer Polytechnic Institute

Founded in 1824, Rensselaer Polytechnic Institute is America's first technological research university. Rensselaer encompasses five schools, over 30 research centers, more than 140 academic programs including 25 new programs, and a dynamic community made up of over 6,800 students and over 104,000 living alumni. Rensselaer faculty and alumni include upwards of 155 National Academy members, six members of the National Inventors Hall of Fame, six National Medal of Technology winners, five National Medal of Science winners, and a Nobel Prize winner in Physics. With nearly 200 years of experience advancing scientific and technological knowledge, Rensselaer remains focused on addressing global challenges with a spirit of ingenuity and collaboration. To learn more, please visit [www.rpi.edu](http://www.rpi.edu).

## About Stevens Institute of Technology

Stevens Institute of Technology is a premier, private research university situated in Hoboken, New Jersey, overlooking the Manhattan skyline. Since its founding in 1870, technological innovation has been the hallmark of Stevens' education and research. Within the university's three schools and one college, 7,300 undergraduate and graduate students collaborate closely with faculty in an interdisciplinary, student-centric, entrepreneurial environment. Academic and research programs spanning business, computing, engineering, the arts, and other disciplines actively advance the frontiers of science and leverage technology to confront our most pressing global challenges.



# Rensselaer

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