NYU CENTER FOR CYBERSECURITY

With experts predicting a global shortfall of almost **2,000,000 cybersecurity professionals** *by 2022, the CCS mission is more vital than ever.*

BORN ANYWHERE
NYU TANDON
MADE IN BROOKLYN

To learn more, visit
cyber.nyu.edu

The **Center for Cybersecurity (CCS)** is a university-wide hub for interdisciplinary work in the essential field of cybersecurity, centered at NYU Tandon. CCS's broad, collaborative range of research initiatives is conducted by key NYU faculty and advanced cybersecurity practitioners with deep expertise in the field, complemented by public discourse and academic workshops for students and faculty. With **an annual research budget in excess of $5 million**, supported by companies and government agencies as wide-ranging as **IBM, Intel,**

BAE Systems, DARPA, NSF, DHS, and NSA to name a few, CCS research is focused on the most pressing cybersecurity questions of our time, including:
- Cybercrime
- Security of Cyberphysical Systems
- Software and System Security
- Security of Machine Learning Systems
- Cyber Governance
- Cyber Security
- Digital Forensics
- Privacy
- Integrated Circuits Supply Chain Strategy

CCS INITIATIVES & MANDATES

Teaching

We promote a rigorous, interdisciplinary curriculum that prepares graduates to defend against increasingly sophisticated cyber threats on many fronts.

Student Scholarships

CCS is home to several highly competitive scholarship programs for students showing great promiose in the field and committed to interdisciplinary work in cybersecurity. Amongst the list of scholarships offered by CCS are: DoD Information Assurance Scholarships, CyberFellows Scholarships, NYU Cyber Scholars Program, Latham & Watkins Award in Technology and Law and research fellowships for PhD applicants, and Bridgewater Scholarship focusing on underserved communities

Research

Our researchers study cyber crime, cyber governance, cyber-physical systems, software security, digital forensics, privacy, and more in order to address pressing societal challenges and to develop novel technological solutions.

Events

CCS hosts public and private events, conferences, roundtables, and workshops that shape the public debate on questions of technology and security, and develop professional communities around specific cybersecurity topics. It hosts CSAW the most comprehensive student run cyber security competition in the world, with finals in 5 countries.

NYU | TANDON SCHOOL OF ENGINEERING

UPDATED 10/22/19
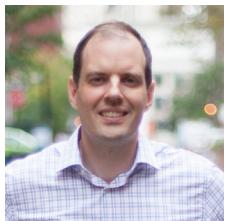
Justin Cappos

Associate Professor of Computer Science and Engineering

Cappos has developed practical security advances adopted by Microsoft, IBM, VMware, git, and most Linux cloud servers. The Update Framework (TUF) software tool he created has been adapted for automotive application and is being adopted by the global industry. He is also co-developer of in-toto, an open-source system that cryptographically ensures the integrity of the software supply chain.
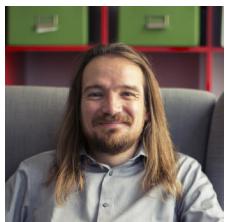
Brendan Dolan-Gavitt

Assistant Professor of Computer Science and Engineering

Dolan-Gavitt's most recent work focuses on techniques to test industrial control systems for vulnerabilities. The research includes probing neural networks for backdoor attacks. Other work includes program analysis, virtualization security, memory forensics, and embedded and cyber-physical systems.

Siddarth Garg

Assistant Professor of Electrical and Computer Engineering

A past winner of Popular Science's "Brilliant 10" honor, given to the top young scientists and engineers, Garg focuses on hardware security, a particular strength of CCS. He explores vulnerabilities in machine learning, computer vision, and computer chip architecture and is the co-developer of a tool that will lead to more secure AI systems for autonomous driving, medical imaging, and other applications.

Rachel Greenstadt

*Associate Professor of Computer Science*

Greenstadt, recipient of an NSF CAREER award for the most promising young researchers, designs systems that can act autonomously but with integrity, so that they can be trusted with important data and decisions. Her research often incorporates elements from artificial intelligence, psychology, economics, data privacy, and system security.

Ramesh Karri

Professor of Electrical and Computer Science • Co-founder and Co-chair of CCS • Academic leader of CSAW

Karri is one of the earliest academics to unearth and attack vulnerabilities in hardware and has traveled the world sharing knowledge on how to secure the supply chain. His research also includes securing cyber-physical systems, additive manufacturing, and nanotechnology; security-aware computer-aided design systems, and protecting the electrical grid.
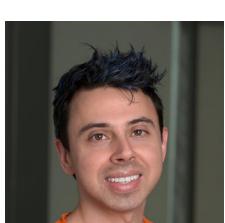
Damon McCoy

Assistant Professor of Computer Science and Engineering

McCoy uses data science to pursue societal good: creating the first detailed account of the ransomware payment ecosystem; unmasking human traffickers; and creating a tool that led to the arrest of Craigslist rental scammers. He conducted one of the first security analyses of a modern automobile. Recent research also focuses on online payment systems, privacy-enhancing technologies, and censorship resistance. His Online Transparency Project has become a multi-nation resource to track political advertising.

Nasir Memon

Professor of Computer Science and Engineering • Co-founder of CCS and CSAW

Memon's recent research centers on digital forensics and authentication. His newest work revealed limitations in fingerprint authentication and proposed a novel approach to detecting deepfakes, the AI-enabled images that are becoming increasingly difficult to detect. Memon is also the founder of NYU Tandon's cybersecurity master's degree program -- one of the first anywhere -- and online programs that disrupt the educational paradigm.