



### **Security & Privacy**



Computer Security Pioneer
Steve Bellovin First to Win Two
USENIX Flame Awards

Bellovin shares his second lifetime award with Tufts' Susan Landau and Georgetown's Matt Blaze for their work on computer science, computer security, law, and public policy. (https://www.cs.columbia.edu/2023/computer-security-pioneer-steve-bellovin-first-to-win-two-usenix-flame-awards/?redirect=a206f71e56390824cae7924398e1567d)



Zoom Security: the Good, the Bad, and the Business Model

(https://www.cs.columbia.edu/2020/zoom-security-the-good-the-bad-and-the-business-model/? redirect=bbcb733c58aa6f93d967c942f0ab72db)

(https://www.cs.columbia.edu/2019/the-data-life-cycle/? redirect=3d7b8f659c69c5c4bc6f61d63c2b39ce)



### **About**

The security group works on a diverse set of security and privacy issues arising across the software/hardware stack.

The key research goal of the group is to design, develop, and deploy principled solutions for improving the security and privacy aspects of computer systems.

The group has a broad set of expertise ranging from systems security to designing privacy policies. It is a highly collaborative group and most of their students are coadvised by multiple faculty members.

### **Faculty and Affiliates**









Steven Bellovin (https://www.cs.c olumbia.edu/~sm

b)

Roxana Geambasu (http://www.cs.co

(https://www.cs.columb(atept///www.b)s.columbia(hettps://snowearrail)info) Suman Jana (http://sumanj.inf o)

(http://www.cs.columbia.edu/~kaiser) **Gail Kaiser** (http://www.cs.co lumbia.edu/~kais er)

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**Salvatore Stolfo** (http://www.cs.co lumbia.edu/~sal/)



Jeannette Wing (https://www.cs.c



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b.org)



### **Research Labs**



Software Systems Laboratory

COLUMBIA UNIVERSITY
INTRUSION DETECTION
SYSTEMS LAB

Intrusion Detection
Systems

(https://www.cs.columbia.edu/lalbs/cs/ffwwaves.columbia.edu/ids/) systems-laboratory/)

Find the COVID-19 Resource Guide here (https://news.columbia.edu/news/update-covid-19-university-guidance).

### Computer Science at Columbia University

The computer science department advances the role of computing in our lives through research and prepares the next generation of computer scientists with its academic programs.

Find out more about the department here (/about).

### **Upcoming Events**

SEP **26** 

Theory Student Seminar

Tuesday 12:30 pm

**CSB 480** 

SEP **29** 

Semirandom CSP refutation via Kikuchi matrices: Algorithms, Certificates, and Connections

Theory Lunch

Friday 12:30 pm

CS conference room (CSB453)

Peter Manohar, Carnegie Mellon University

OCT

Theory Student Seminar

03

Tuesday 12:40 pm

CSB 480

OCT

Theory Lunch - Sunoo Park

06

Theory Lunch

Friday 12:30 pm

CS conference room (CSB453)

Sunoo Park, New York University

View All >> (https://www.cs.columbia.edu/calendar/)

In the News

# MIT Technology Review

The Computer Scientist Who Hunts for Costly Bugs in Crypto Code (https://www.cs.columbia.edu/2023/the-computer-scientist-who-hunts-for-costly-bugs-in-crypto-code/?redirect=0c99d322ac4a621f0cb1bf31ffea64ba) (Ronghui Gu)

(https://www.cs.columbia.edu/2023/the-computer-scientist-who-hunts-for-costly-bugs-in-crypto-code/? redirect=0c99d322ac4a621f0cb1bf31ffea64ba)



This Self-Aware Robot Taught Itself How to Control Its Own Body (https://www.cs.columbia.edu/2022/this-self-aware-robot-taught-itself-how-to-control-its-own-body/?redirect=2275dd724f7cd014090b808bf9f6c3c9)

(Carl Vondrick)

(https://www.cs.columbia.edu/2022/this-self-aware-robot-taught-itself-how-to-control-its-own-body/? redirect=2275dd724f7cd014090b808bf9f6c3c9)



Columbia Awarded \$185 Million in Patent-Infringement Lawsuit (https://www.cs.columbia.edu/2022/columbia-awarded-185-million-in-patent-infringement-lawsuit/? redirect=00ff51e39830d7b7a1521ed64b5174b7)

(Salvatore Stolfo)

(https://www.cs.columbia.edu/2022/columbia-awarded-185-million-in-patent-

https://www.cs.columbia.edu/areas/security/

infringement-lawsuit/? redirect=00ff51e39830d7b7a1521ed64b5174b7)



Mathematicians Transcend Geometric Theory of Motion (https://www.cs.columbia.edu/2021/mathematicians-transcend-geometric-theory-of-motion/? redirect=5673fa940ca6c0bede69f18e4810731e)

(Andrew Blumberg)

(https://www.cs.columbia.edu/2021/mathematicians-transcend-geometric-theory-of-motion/? redirect=5673fa940ca6c0bede69f18e4810731e)

### FINANCIAL TIMES

Auto-scans of phones would violate data privacy, say security experts (https://www.cs.columbia.edu/2021/auto-scans-of-phones-would-violate-data-privacy-say-security-experts/?redirect=2ed01b3c9d786fd4c2557ead92be01b1) (Steven Bellovin)

(https://www.cs.columbia.edu/2021/auto-scans-of-phones-would-violate-data-privacy-say-security-experts/? redirect=2ed01b3c9d786fd4c2557ead92be01b1)

**Press Mentions** 



How The Morning Show Rewrites the Notorious 2014 Sony Hack (https://www.cs.columbia.edu/2023/how-the-morning-show-rewrites-the-notorious-2014-sony-hack/? redirect=01cb778274fb38a72826afd84056ab79)

(Suman Jana)

(https://www.cs.columbia.edu/2023/how-the-morning-show-rewrites-the-notorious-2014-sony-hack/? redirect=01cb778274fb38a72826afd84056ab79)

The Washington Post Your Résumé Isn't the Only Thing Popular Job Sites Evaluate (https://www.cs.columbia.edu/2023/your-resume-isnt-the-only-thing-popular-job-sites-evaluate/?redirect=f25fb139a595563c5d6b2ebf335c354a)

(https://www.cs.columbia.edu/2023/your-resume-isnt-the-only-thing-popular-job-sites-evaluate/? redirect=f25fb139a595563c5d6b2ebf335c354a)

## SCIENTIFIC AMERICAN

Yes, AI Models Can Get Worse over Time (https://www.cs.columbia.edu/2023/yes-ai-models-can-get-worse-over-time/? redirect=bd00821a18c6554527db1cab787c273b)

(Kathleen McKeown, Vishal Misra)

(https://www.cs.columbia.edu/2023/yes-

ai-models-can-get-worse-over-

time/?

redirect=bd00821a18c6554527db1cab787c273b)



Here's how AI is being used to unlock secrets still hidden in the human brain (https://www.cs.columbia.edu/2023/hereshow-ai-is-being-used-to-unlock-secrets-still-hidden-in-thehuman-brain/?...

(Richard Zemel)

(https://www.cs.columbia.edu/2023/hereshow-ai-is-being-used-to-unlocksecrets-still-hidden-in-the-humanbrain/?

redirect=4055e95b510974e140a3552097549bb7)

Does Al in NYC need restrictions? Officials hold closed**lia Unde<b>fordingeting**ri**osdiscuss**EAS) (https://www.cs.columbia.edu/2023/does-ai-in-nvc-needrestrictions-officials-hold-closed-door-meeting-to-discuss... M.S./Ph.D. Application (https://apple/wingineering.columbia.edu/apply/)

(https://www.cs.columbia.edu/2023/does-MS Express Application for Current Undergrads ai-in-nyc-nead-restrictions of figures figures in the columbia and the columbia ai-in-nyc-nead-restrictions of the columbia ai-in-nyc-nead-restriction ai-

hold-closed-door-meeting-to-

undergraduates)

discuss/? CS@CU MS Bridge Program in Computer Science (https://www.cs.columbia.edu/msredirect=557ac481d534504ff10bb8a2246504e8)

(https://www.columbia.edu)

### Links

Map (https://www.cs.columbia.edu/wpcontent/uploads/2022/07/morningsidemap 2015aug-7.pdf)

School of Engineering And Applied Science (http://engineering.columbia.edu/)

Data Science Institute (http://datascience.columbia.edu/)

CRF (http://www.cs.columbia.edu/crf)

MICE (https://mice.cs.columbia.edu)

ASCENT Program (https://www.cs.columbia.edu/ascent/)

Copyright FAQ (https://www.cs.columbia.edu/resources/copyright/)

CS Advising (https://www.cs.columbia.edu/academic-advising/)

### Contact

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Directions (https://www.cs.columbia.edu/resources/directions/)

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