



COMPUTER SCIENCE^(/)



COLUMBIA | ENGINEERING (http://engineering.columbia.edu/)
The Fu Foundation School of Engineering and Applied Science

Computer Engineering



With \$5.7M DARPA grant, Simha Sethumadhavan will lead effort to build security into hardware-software interface

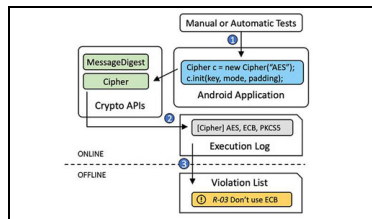
(https://www.cs.columbia.edu/2018/with-5-7m-darpa-grant-simha-sethumadhavan-will-lead-effort-to-build-security-into-hardware-software-interface/?redirect=0d580671443aea5c3f580c01fc703257)



Steven Nowick Bids Farewell to the CS Department

(https://www.cs.columbia.edu/2019/12678/)

(https://www.cs.columbia.edu/2020/new-tool-detects-unsafe-security-practices-in-android-apps/?redirect=4de2ba605aad75d487aadb8994ed8f72)



**New Tool Detects Unsafe
Security Practices in Android
Apps**

Open-source CRYLOGGER is the first tool that detects cryptographic misuses by running the Android app instead of analyzing its code.

About

Computer Engineering is where the study of hardware and software interfaces come together. It draws on techniques from Electrical Engineering and Computer Science to imagine and realize the next generation of devices and chips.

The group researches the platforms that power all forms of computation – from IoT to mobile, data centers to supercomputers. Students learn how to design, create, and test software, hardware, and system designs for applications in business, industry, and government.

The various research groups collaborate in diverse areas including computer architecture, hardware security, networks, and distributed embedded systems.

Faculty and Affiliates



(<http://www.cs.columbia.edu/~luca>)

Luca Carloni
(<http://www.cs.columbia.edu/~luca>)



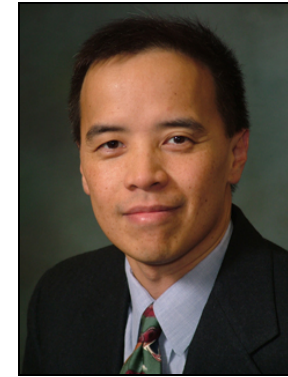
(<http://www.cs.columbia.edu/~sedwards>)

Stephen Edwards
(<http://www.cs.columbia.edu/~sedwards>)



(<http://www.cs.columbia.edu/~martaha/>)

Martha Kim
(<http://www.cs.columbia.edu/~martaha/>)



(<http://www.cs.columbia.edu/~nieh/>)

Jason Nieh
(<http://www.cs.columbia.edu/~nieh/>)



(<http://www.cs.columbia.edu/~simha>)

Simha Sethumadhavan
(<http://www.cs.columbia.edu/~simha>)



(<https://brianplancher.com/>)

Brian Plancher

(<https://brianplancher.com/>)

Research Labs



Software Systems
Laboratory

(<https://www.cs.columbia.edu/labs/software-systems-laboratory/>)

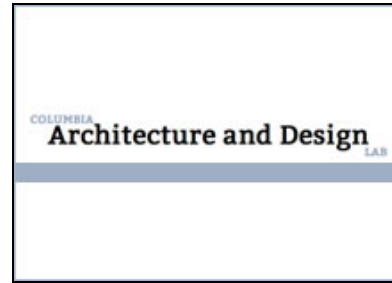


Computer Architecture
and Security Technologies

(<https://castl.cs.columbia.edu/>)



System-Level Design
Group
(<http://sld.cs.columbia.edu>)



Columbia Architecture and
Design Lab
(<http://arcade.cs.columbia.edu>)

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

CSB 480

Theory Student Seminar

Tuesday 12:30 pm

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
03

CSB 480

Theory Student Seminar

Tuesday 12:40 pm

OCT
06

Friday 12:30 pm

CS conference room (CSB453)

Sunoo Park, New York University

Theory Lunch - Sunoo Park

Theory Lunch

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

In the News

MIT Technology Review

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

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/2022/this-self-aware-robot-taught-itself-how-to-control-its-own-body/?redirect=2275dd724f7cd014090b808bf9f6c3c9>)

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)



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-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>)



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

The logo for the magazine TIME, rendered in a large, red, serif font.

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 logo for The Washington Post, featuring the words "The Washington Post" in a black, serif font, with "The" and "Post" in a larger, more ornate script.

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>)

The logo for SCIENTIFIC AMERICAN, featuring the words "SCIENTIFIC AMERICAN" in a large, black, serif font.

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/heres-how-ai-is-being-used-to-unlock-secrets-still-hidden-in-the-human-brain/?...>)

(Richard Zemel)

(<https://www.cs.columbia.edu/2023/heres-how-ai-is-being-used-to-unlock-secrets-still-hidden-in-the-human-brain/?redirect=4055e95b510974e140a3552097549bb7>)



Does AI in NYC need restrictions? Officials hold closed-door meeting to discuss (<https://www.cs.columbia.edu/2023/does-ai-in-nyc-need-restrictions-officials-hold-closed-door-meeting-to-discuss...>)

([https://www.cs.columbia.edu/2023/does-ai-in-nyc-need-restrictions-officials-hold-closed-door-meeting-to-discuss/?CS@CU MS Bridge Program in Computer Science](https://www.cs.columbia.edu/2023/does-ai-in-nyc-need-restrictions-officials-hold-closed-door-meeting-to-discuss/?CS@CU%20MS%20Bridge%20Program%20in%20Computer%20Science) (<https://www.cs.columbia.edu/ms-bridge/>)
 redirect=557ac481d534504ff10bb8a2246504e8)

(<https://www.columbia.edu>)

Links

Map (https://www.cs.columbia.edu/wp-content/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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Contact Us (</contact>)

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

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