

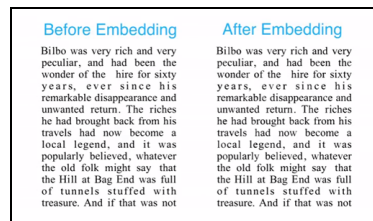


COMPUTER SCIENCE^(/)



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

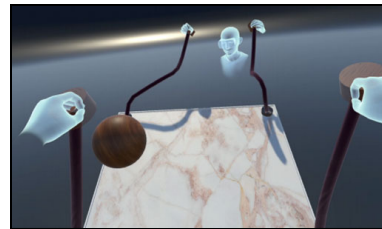
Graphics & User Interfaces



FontCode: Hiding information in plain text, unobtrusively and across file types

FontCode imperceptibly changes, or perturbs, the shapes of fonts in ordinary text to embed hidden information, without the existence of the secret information being perceived.

(<https://www.cs.columbia.edu/2018/fontcode-hiding-information-in-plain-text-unobtrusively-and-across-file-types/>)

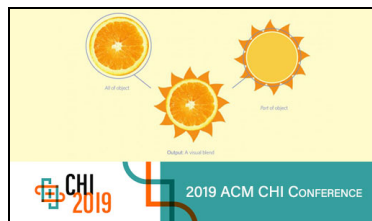


Graphics and User Interfaces Lab Wins at NYC Media Lab Summit

(<https://www.cs.columbia.edu/2019/vision-and-graphics-lab-wins-at-nyc-media-lab-summit/?>

redirect=83c8bf6c09b14461bc93ef97d92295f8)

(<https://www.cs.columbia.edu/2019/computer-human-interaction-papers-delve-into-livestreaming-visual-design-and-creative-writing/>)



**Computer-Human Interaction
Papers Delve into Livestreaming,
Visual Design, and Creative
Writing**

About

Computation is fundamentally changing the way people see and interact with the world. Many parts of society have been transformed by graphics and user interfaces.

The group has played instrumental roles in developing groundbreaking graphics for Hollywood movies, life-saving augmented and virtual reality applications in the medical field, camera phone technology used by billions of people, 3D printing technologies for consumers and industry uses, and AI tools that aid the computational design process. Additionally, they have a strong commitment to enabling computers to be used by all people regardless of ability.

The classes involve hands-on learning and help students develop a portfolio of projects that demonstrate their unique abilities and interests.

Faculty and Affiliates



(<https://www.cs.columbia.edu/~chilton/>)

Lydia Chilton

(<https://www.cs.columbia.edu/~chilton/>)



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

Steven Feiner

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



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

Shree Nayar

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



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Brian Smith

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Changxi Zheng

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(<https://www.cs.columbia.edu/~xia>)

Xia Zhou

(<https://www.cs.columbia.edu/~xia>)

Research Labs



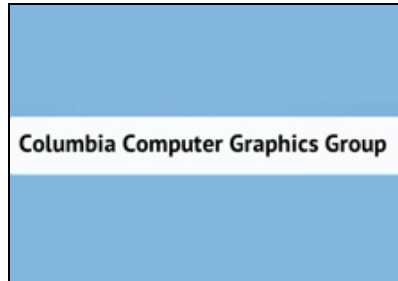
Computer-Enabled
Abilities Laboratory

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



Computer Vision and
Graphics Center

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



Columbia Computer
Graphics Group

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



Computer Graphics and
User Interfaces

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

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

Friday 12:30 pm

CS conference room (CSB453)

Peter Manohar, Carnegie Mellon University

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

Theory Lunch

OCT
03

CSB 480

Theory Student Seminar

Tuesday 12:40 pm

OCT
06

Theory Lunch - Sunoo Park

Theory Lunch

Friday 12:30 pm

CS conference room (CSB453)

Sunoo Park, New York University

[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)



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-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

TIME

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>)



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/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>)

Gothamist

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

Columbia Undergraduate Admissions (SEAS)

(Jeanette Wing)

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

ai-in-nyc-need-restrictions-officials-hold-closed-door-meeting-to-discuss/?

hold-closed-door-meeting-to-discuss/?

discuss/? (http://gradengineering.columbia.edu/ms-express-application-columbia-university-undergraduates)

redirect=557ac481d534504ff10bb8a2246504e8)

CS@CU MS Bridge Program in Computer Science (https://www.cs.columbia.edu/ms-bridge/)

(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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500 West 120 Street, Room 450

MC0401

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Fax: +1-212-853-8440

Contact Us (/contact)

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

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Webmaster (<mailto:webmaster@cs.columbia.edu>)

Privacy Policy (<https://www.cs.columbia.edu/privacy-policy/>)