



COMPUTER SCIENCE^(/)



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

Vision & Robotics



CS Welcomes Three New Faculty Members

(<https://www.cs.columbia.edu/2019/cs-welcomes-three-new-faculty-members/>)

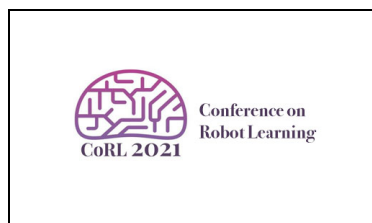


9 Papers From CS Researchers Accepted to CVPR 2021

Research from the department has been accepted to the 2021 Computer Vision and Pattern Recognition (CVPR) Conference. The annual event explores machine learning, artificial intelligence, and computer vision research and its applications.

(<https://www.cs.columbia.edu/2021/cvpr-2021/>)

(<https://www.cs.columbia.edu/2021/shuran-song-and-huy-ha-wins-best-system-paper-at-cori-2021/>)



**Shuran Song and Huy Ha Win
the Best System Paper at CoRL
2021**

Research papers from the department were accepted to the Conference on Robot Learning 2021 (CoRL) and the Best System Paper award was given to Assistant Professor Shuran Song and PhD student Huy Ha.

About

The group studies the computational foundations for visual and robotic intelligence. They investigate machines that are able to perceive their surroundings and interact with them too.

The group of ten faculty often collaborate across the sciences and the arts. They leverage insights from both nature and math to advance the fundamentals of perception and interaction, and they also transfer their research to tackle practical challenges across disciplines. Several of the faculty are cross-listed with the Data Science Institute.

Faculty and Affiliates

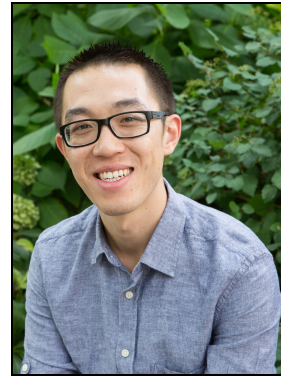


(<http://www.peternbelhumeur.com>) (<http://www.ee.columbia.edu/~sfchang>) (<http://vision.columbia.edu/~tdear>) (<http://www.cs.columbia.edu/~jrk/>)

Peter Belhumeur
(<http://www.peternbelhumeur.com>)



Shih-Fu Chang
(<http://www.ee.columbia.edu/~sfchang>)



Tony Dear
(<http://www.cs.columbia.edu/~tdear>)



John Kender
(<http://www.cs.columbia.edu/~jrk/>)



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

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



Brian Smith
(<http://www.cs.columbia.edu/~brian/>)



Carl Vondrick
(<http://www.cs.columbia.edu/~vondrick/>)



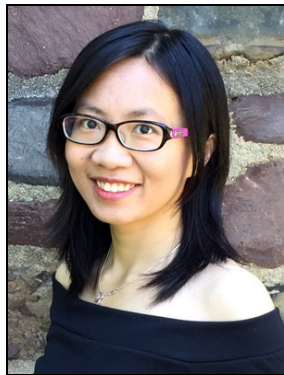
Changxi Zheng
(<http://www.cs.columbia.edu/~cxz/>)



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

Xia Zhou

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



(<https://www.cs.columbia.edu/~shurans/index.html>)

Shuran Song

(<https://www.cs.columbia.edu/~shurans/index.html>)

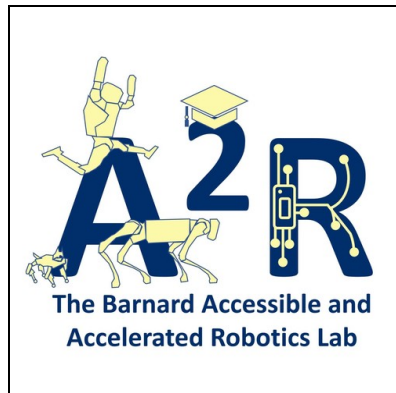


(<https://brianplancher.com/>)

Brian Plancher

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

Research Labs



The Barnard Accessible and Accelerated Robotics Lab (<https://a2r-lab.org>)



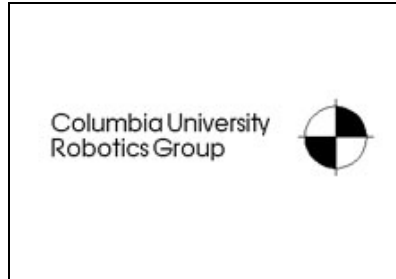
Computer-Enabled Abilities Laboratory
(<https://ceal.cs.columbia.edu/>)



Columbia Artificial
Intelligence and Robotics
Lab
(<https://cair.cs.columbia.edu/>)



Digital Video and
Multimedia
(<http://www.ee.columbia.edu/ln/dvmm/>)



Robotics Laboratory
(<http://www.cs.columbia.edu/robotics/>)



Columbia Automated
Vision Environment
(<http://www.cs.columbia.edu/CAVE/>)

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>)



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/?redirect=557ac481d534504ff10bb8a2246504e8)

ai-in-nyc-need-restrictions-officials-hold-closed-door-meeting-to-discuss/? (https://apply.engineering.columbia.edu/apply/)

hold-closed-door-meeting-to-discuss/? (http://gradengineering.columbia.edu/ms-express-application-columbia-university-undergraduates)

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/)

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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/>)