



**CLASS  
OF**

**2015**

Early Career

**ENGINEERS TO WATCH**

# A Note from the Assistant Director

I would like to offer heartiest congratulations to you on your selection as the new NSF Engineering CAREER recipients. You have already embarked on journeys of professional success. In the coming years, I know you will help create a wonderful future for our society with bold ideas and creative solutions. With great anticipation, I await your amazing contributions to engineering and the nation. Indeed, they are already happening.

At NSF, our mission is “To promote the progress of science; to advance the national health, prosperity and welfare; and to secure the national defense.” We believe that talented and energetic people are absolutely critical to success in this endeavor. This CAREER award is a signal of our belief in your great potential for pushing the frontiers of knowledge, creating powerful innovations, and educating the next generation of engineers. I encourage and challenge you to reach for the stars in the next five years and beyond, and make the improbable possible.



**Dr. Pramod Khargonekar**  
NSF Assistant Director for Engineering

# COMMUNICATIONS AND NETWORKS



**Amin Arbabian**  
Stanford University  
[Award 1454107](#)



**Drew Hall**  
University of California  
San Diego  
[Award 1454608](#)



**Riccardo Lattanzi**  
NYU Medical Center  
[Award 1453675](#)



**Omeed Momeni**  
University of California  
Davis  
[Award 1454732](#)



**Vishal Monga**  
Pennsylvania State University  
[Award 1454218](#)



**Marvin Onabajo**  
Northeastern University  
[Award 1451213](#)



**Jacques Rudell**  
University of Washington  
[Award 1454098](#)



**Vishal Saxena**  
Boise State University  
[Award 1454411](#)



**Hua Wang**  
Georgia Tech  
[Award 1454555](#)



**Jing Yang**  
University of Arkansas  
[Award 1454471](#)

# DEVICES AND SENSORS



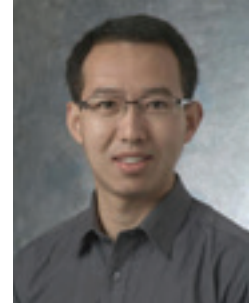
**Antonio Badolato**  
University of Rochester  
[Award 1454021](#)



**Andrei Faraon**  
California Institute  
of Technology  
[Award 1454607](#)



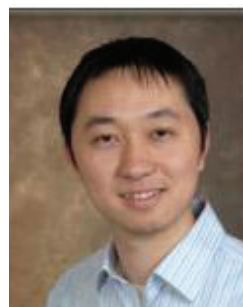
**Daniel Feezell**  
University of New Mexico  
[Award 1454691](#)



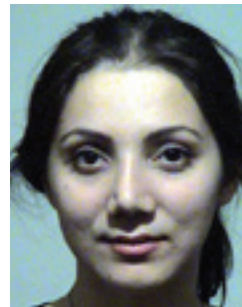
**Philip Feng**  
Case Western Reserve  
[Award 1454570](#)



**Anthony Hoffman**  
University of Notre Dame  
[Award 1454076](#)



**Juejun Hu**  
Massachusetts Institute  
of Technology  
[Award 1453218](#)



**Mercedeh Khajavikhan**  
University of Central Florida  
[Award 1454531](#)



**Michelle Knowles**  
University of Denver  
[Award 1452057](#)



**Xiaogan Liang**  
University of Michigan  
Ann Arbor  
[Award 1452916](#)



**Claudia Mewes**  
University of Alabama  
Tuscaloosa  
[Award 1452670](#)



**Fabio Semperlotti**  
University of Notre Dame  
[Award 1453330](#)



**Jing Tang**  
Oakland University  
[Award 1454552](#)

# DEVICES AND SENSORS



**Sindy KY Tang**  
Stanford University  
[Award 1454542](#)



**Hui Yang**  
University of South Florida  
[Award 1454012](#)

Looking forward to seeing a lot  
of these faces on the covers of  
science and engineering magazines  
someday.

Samir El-Ghazaly

# EDUCATION



[Jennifer DeBoer](#)  
Purdue University  
[Award 1454558](#)



[Morgan Hynes](#)  
Purdue University  
[Award 1454152](#)



[Alejandra Magana-de-Leon](#)  
Purdue University  
[Award 1449238](#)

Stay in touch! Seriously, we want to  
hear about your accomplishments.

Don Millard

# ENERGY



**Bilal Akin**

University of Texas at Dallas  
[Award 1454311](#)



**C. Lindsay Anderson**

Cornell University  
[Award 1453615](#)



**Arindam Banerjee**

Lehigh University  
[Award 1453056](#)



**Peter Bermel**

Purdue University  
[Award 1454315](#)



**Jesse Bond**

Syracuse University  
[Award 1454346](#)



**Srabanti Chowdhury**

Arizona State University  
[Award 1454320](#)



**Sairaj Dhople**

University of Minnesota -  
Twin Cities  
[Award 1453921](#)



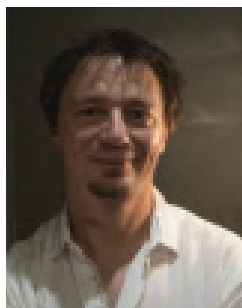
**Zoica Cerasela Dinu**

West Virginia University  
[Award 1454230](#)



**Gabrielle Gaustad**

Rochester Institute  
of Technology  
[Award 1454166](#)



**Lars Grabow**

University of Houston  
[Award 1454384](#)



**Ryan Hartman**

University of Alabama  
Tuscaloosa  
[Award 1453062](#)



**Jiarong Hong**

University of Minnesota -  
Twin Cities  
[Award 1454259](#)

# ENERGY



**Joel Kaar**  
University of Colorado  
at Boulder  
[Award 1454379](#)



**Daniel Ludois**  
University of Wisconsin  
Madison  
[Award 1452230](#)



**Shalabh Maroo**  
Syracuse University  
[Award 1454450](#)



**George Nelson**  
University of Alabama  
in Huntsville  
[Award 1454437](#)



**Sung Yeul Park**  
University of Connecticut  
[Award 1454578](#)



**Gregory Rieker**  
University of Colorado  
at Boulder  
[Award 1454496](#)



**Yuriy Roman**  
Massachusetts Institute  
of Technology  
[Award 1454299](#)



**Cassandra Rutherford**  
University of Illinois at  
Urbana-Champaign  
[Award 1454413](#)



**Arunkumar  
Subramanian**  
Virginia Commonwealth  
University  
[Award 1453966](#)



**Christopher Vermillion**  
University of North Carolina  
at Charlotte  
[Award 1453912](#)



**Liping Wang**  
Arizona State University  
[Award 1454698](#)



**Miao Yu**  
University of South Carolina  
at Columbia  
[Award 1451887](#)



# ENERGY



[Xiao Zhang](#)

Washington State University

[Award 1454575](#)

Each researcher here has  
the potential to shape our  
future. Together, imagine the  
possibilities!

Deborah Goodings

# HEALTH



**Josephine Allen**  
University of Florida  
[Award 1453098](#)



**Turgay Ayer**  
Georgia Tech  
[Award 1452999](#)



**Kartik Balachandran**  
University of Arkansas  
[Award 1452943](#)



**Bahareh Behkam**  
Virginia Tech  
[Award 1454226](#)



**Danielle Benoit**  
University of Rochester  
[Award 1450987](#)



**Bryan Berger**  
Lehigh University  
[Award 1452855](#)



**Iman Borazjani**  
SUNY at Buffalo  
[Award 1453982](#)



**Mark Brynildsen**  
Princeton University  
[Award 1453325](#)



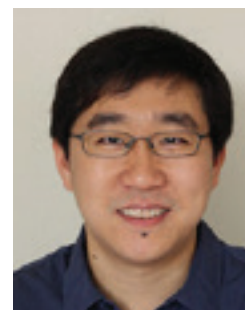
**David Colby**  
University of Delaware  
[Award 1454508](#)



**Filippo Coletti**  
University of Minnesota -  
Twin Cities  
[Award 1453538](#)



**Eve Donnelly**  
Cornell University  
[Award 1452852](#)



**Xin Ge**  
University of California  
Riverside  
[Award 1453645](#)

# HEALTH



**Fatemeh Hassanipour**  
University of Texas  
at Dallas  
[Award 1454334](#)



**Jin He**  
Florida International  
University  
[Award 1454544](#)



**Caryn Heldt**  
Michigan Technological  
University  
[Award 1451959](#)



**Christine Hendon**  
Columbia University  
[Award 1454365](#)



**Brenton Hoffman**  
Duke University  
[Award 1454257](#)



**Kristopher Kilian**  
University of Illinois at  
Urbana-Champaign  
[Award 1454616](#)



**Sang Wook Lee**  
Catholic University  
of America  
[Award 1452763](#)



**Somin Lee**  
University of Michigan  
Ann Arbor  
[Award 1454188](#)



**Christian Metallo**  
University of California,  
San Diego  
[Award 1454425](#)



**Kathryn Miller-Jensen**  
Yale University  
[Award 1454301](#)



**Kristin Myers**  
Columbia University  
[Award 1454412](#)



**Shikha Nangia**  
Syracuse University  
[Award 1453312](#)

# HEALTH



**Ramin Pashaie**  
University of Wisconsin  
Milwaukee  
[Award 1454300](#)



**Amit Pathak**  
Washington University  
[Award 1454016](#)



**Edward Sander**  
University of Iowa  
[Award 1452728](#)



**Evan Scott**  
Northwestern University  
[Award 1453576](#)



**Erkin Şeker**  
University of California  
Davis  
[Award 1454426](#)



**Sarah Stabenfeldt**  
Arizona State University  
[Award 1454282](#)



**Katherine Steele**  
University of Washington  
[Award 1452646](#)

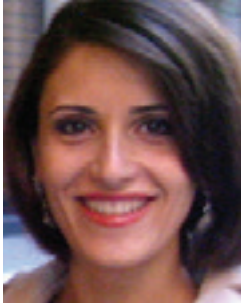


**Matthias Stephan**  
Fred Hutchinson Cancer  
Research Center  
[Award 1452492](#)

*I'm thrilled to see the  
inspiring careers represented in  
these pages.*

*JoAnn Lighty*

# INFRASTRUCTURE



**Shideh Dashti**  
University of Colorado  
at Boulder  
[Award 1454431](#)



**Matthew Eatherton**  
Virginia Tech  
[Award 1453960](#)



**Matthew Eckelman**  
Northeastern University  
[Award 1454414](#)



**Venkata Gadhamshetty**  
South Dakota School of  
Mines and Technology  
[Award 1454102](#)



**Eric Hernandez**  
University of Vermont  
[Award 1453502](#)



**Michael Lepech**  
Stanford University  
[Award 1453881](#)



**Ali Nejat**  
Texas Tech University  
[Award 1454650](#)



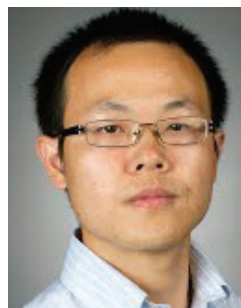
**Tong Qiu**  
Pennsylvania State University  
[Award 1453103](#)



**Jennifer Rice**  
University of Florida  
[Award 1452911](#)



**Ketan Savla**  
University of Southern  
California  
[Award 1454729](#)



**Pingbo Tang**  
Arizona State University  
[Award 1454654](#)

# MANUFACTURING



**Michael Baldea**

University of Texas at Austin  
[Award 1454433](#)



**Jeong-Hyun Cho**

University of Minnesota -  
Twin Cities  
[Award 1454293](#)



**Weiwei Deng**

University of Central Florida  
[Award 1454406](#)



**Adam Feinberg**

Carnegie Mellon University  
[Award 1454248](#)



**Rebecca Kramer**

Purdue University  
[Award 1454284](#)



**Arif Malik**

Saint Louis University  
[Award 1454405](#)



**Matthew McCarthy**

Drexel University  
[Award 1454407](#)



**Manu Prakash**

Stanford University  
[Award 1453190](#)



**Gurpreet Singh**

Kansas State University  
[Award 1454151](#)



**Murali Sundaram**

University of Cincinnati  
[Award 1454181](#)



**Keith Tyo**

Northwestern University  
[Award 1452549](#)

# MATERIALS



**Avinash Dongare**  
University of Connecticut  
[Award 1454547](#)



**Jaafar El-Awady**  
Johns Hopkins University  
[Award 1454072](#)



**Kendra Erk**  
Purdue University  
[Award 1454360](#)



**Bora Gencturk**  
University of Houston  
[Award 1453757](#)



**Stefano Gonella**  
University of Minnesota -  
Twin Cities  
[Award 1452488](#)



**Douglas Holmes**  
Boston University  
[Award 1454153](#)



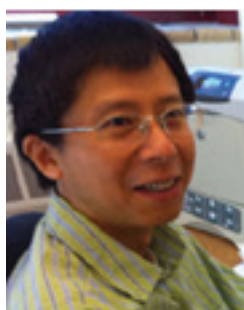
**Julian Rimoli**  
Georgia Tech  
[Award 1454104](#)



**Aaron Stebner**  
Colorado School of Mines  
[Award 1454668](#)

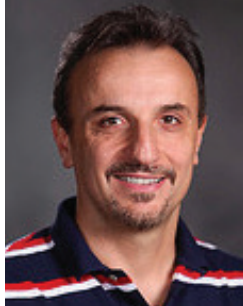


**Kay Wille**  
University of Connecticut  
[Award 1454574](#)



**Ning Wu**  
Colorado School of Mines  
[Award 1454095](#)

# ROBOTICS AND CONTROL



**Behcet Acikmese**

University of Texas at Austin

[Award 1454543](#)



**Ran Dai**

Iowa State University

[Award 1453637](#)



**Todd Humphreys**

University of Texas at Austin

[Award 1454474](#)



**Girish Krishnan**

University of Illinois at

Urbana-Champaign

[Award 1454276](#)



**Marco Pavone**

Stanford University

[Award 1454737](#)



**C. David Remy**

University of Michigan

Ann Arbor

[Award 1453346](#)



**Conor Walsh**

Harvard University

[Award 1454472](#)

*This is the class most likely to  
change the future.*

*Grace Wang*



# SYSTEMS ENGINEERING AND DESIGN



**Amitabh Basu**  
Johns Hopkins University  
[Award 1452820](#)



**Alireza Doostan**  
University of Colorado  
at Boulder  
[Award 1454601](#)



**David Goldberg**  
Georgia Tech  
[Award 1453929](#)



**Srikanth Jagabathula**  
New York University  
[Award 1454310](#)



**Fatma Kılınc-Karzan**  
Carnegie Mellon University  
[Award 1454548](#)



**Xiaopeng Li**  
Mississippi State University  
[Award 1453949](#)



**Nader Motee**  
Lehigh University  
[Award 1454022](#)



**Sebastian Pokutta**  
Georgia Tech  
[Award 1452463](#)



**Yue Wang**  
Clemson University  
[Award 1454139](#)



**Yanhong Karen Zheng**  
Massachusetts Institute  
of Technology  
[Award 1452875](#)



**Enlu Zhou**  
Georgia Tech  
[Award 1453934](#)

# WATER AND ENVIRONMENT



**Omar Abdul-Aziz**  
Florida International  
University  
[Award 1454435](#)



**Caitlyn Butler**  
University of Massachusetts  
Amherst  
[Award 1452613](#)



**Brian Chaplin**  
University of Illinois  
at Chicago  
[Award 1453081](#)



**John Fortner**  
Washington University  
[Award 1454656](#)



**Huilin Gao**  
Texas A&M  
[Award 1454297](#)



**Johan Larsson**  
University of Maryland  
College Park  
[Award 1453633](#)



**Boris Lau**  
University of Massachusetts  
Amherst  
[Award 1454443](#)



**Kelly Pennell**  
University of Kentucky  
[Award 1452800](#)



**Christina Remucal**  
University of Wisconsin  
Madison  
[Award 1451932](#)



**Fernando Rosario-Ortiz**  
University of Colorado  
at Boulder  
[Award 1453906](#)



**Timothy Vadas**  
University of Connecticut  
[Award 1454448](#)



**Qiong Zhang**  
University of South Florida  
[Award 1454559](#)