



Grace Gao

Assistant Professor of Aeronautics and Astronautics and, by courtesy, of Electrical Engineering

 Curriculum Vitae available Online

Bio

BIO

Grace Gao is an assistant professor in the Department of Aeronautics and Astronautics at Stanford University. She leads the Navigation and Autonomous Vehicles Laboratory (NAV Lab). Before joining Stanford University, she was faculty at University of Illinois at Urbana-Champaign. She obtained her Ph.D. degree at Stanford University. Her research is on robust and secure perception, localization and navigation with applications to manned and unmanned aerial vehicles, autonomous driving cars, as well as space robotics.

Prof. Gao has won a number of awards, including the NSF CAREER Award, the Institute of Navigation Early Achievement Award and the RTCA William E. Jackson Award. She received the Inspiring Early Academic Career Award by Stanford University, and Distinguished Promotion Award from University of Illinois at Urbana-Champaign. She has won Best Paper/Presentation of the Session Awards 29 times at Institute of Navigation conferences over the span of 17 years. She received the Dean's Award for Excellence in Research from the College of Engineering, University of Illinois. For her teaching and advising, Prof. Gao has been on the List of Teachers Ranked as Excellent by Their Students at University of Illinois multiple times. She won the College of Engineering Everitt Award for Teaching Excellence, the Engineering Council Award for Excellence in Advising, and AIAA Illinois Chapter's Teacher of the Year. Prof. Gao also received AIAA Stanford Chapter Advisor of the Year Award in 2022; Teacher of the Year Award in 2023.

ACADEMIC APPOINTMENTS

- Assistant Professor, Aeronautics and Astronautics
- Assistant Professor (By courtesy), Electrical Engineering

HONORS AND AWARDS

- Best Paper/Presentation of the Session Award (28 times in total), ION GNSS+ Conference (2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2008, 2007)
- AIAA Teacher of the Year, AIAA Stanford Chapter (2023)
- AIAA Advisor of the Year, AIAA Stanford Chapter (2022)
- Inspiring Early Academic Career Award, Stanford Faculty Womens Forum (2022)
- Campus Distinguished Promotion Award, University of Illinois at Urbana-Champaign (2019)
- List of Teachers Ranked as Excellent by Their Students, University of Illinois at Urbana-Champaign (2018, 2017, 2015, 2014)
- Engineering Council Award for Excellence in Advising, University of Illinois at Urbana-Champaign (2018, 2017)
- CAREER Award, National Science Foundation (2018)
- Dean's Award for Excellence in Research, University of Illinois at Urbana-Champaign (2017)
- AIAA Teacher of the Year, AIAA Illinois Chapter (2016)

- Best Paper Award, IEEE/ION PLANS Conference (2016)
- Everitt Award for Teaching Excellence, University of Illinois at Urbana-Champaign (2015)
- 50 GNSS Leaders to Watch, GPS World Magazine (2009)
- William E. Jackson Award (for outstanding PhD thesis), Radio Technical Commission for Aeronautics (RTCA) (2009)
- Early Achievement Award, Institute of Navigation (2008)

PROFESSIONAL EDUCATION

- Ph.D., Stanford University

LINKS

- Stanford NAV Lab: <https://navlab.stanford.edu/>

Teaching

COURSES

2023-24

- Flight Mechanics & Controls: AA 173 (Spr)
- Global Positioning Systems: AA 272 (Aut)
- Navigation for Autonomous Systems: AA 275 (Win)

2022-23

- Global Positioning Systems: AA 272 (Win)
- Navigation for Autonomous Systems: AA 275 (Aut)

2021-22

- Flight Mechanics & Controls: AA 173 (Spr)
- Global Positioning Systems: AA 272 (Win)
- Navigation for Autonomous Systems: AA 275 (Aut)

2020-21

- Flight Mechanics & Controls: AA 173 (Spr)
- Global Positioning Systems: AA 272 (Win)
- Navigation for Autonomous Systems: AA 275 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jason Anderson, Frank Lai, Zixi Liu, Shane Lowe, Keiko Nagami

Orals Chair

Andrew Wu

Postdoctoral Faculty Sponsor

Shubh Gupta, Tara Mina

Orals Evaluator

Jason Anderson, ADYASHA MOHANTY, Molly Zhang

Doctoral Dissertation Advisor (AC)

Guillem Casadesus Vila, Marta Cortinovis, Adam Dai, Keidai Iiyama, Derek Knowles, ADYASHA MOHANTY, Daniel Neamati, Mira Partha, Asta Wu, Alan Yang

Master's Program Advisor

Leo Arnal, Natasha Evans, Lennon Headlee, Maxime Nee, Sumanth Nethi, Mark Paral, Akshata Patil, David Stier, Harry Zhao

Doctoral (Program)

Kaila Coimbra