




## Nick Delurgio

Masters Student in Mechanical Engineering, admitted Autumn 2022

 Resume available Online

### Bio

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#### BIO

Nick Delurgio is a graduate student in Mechanical Engineering at Stanford University. Nick previously received his B.S. in Aerospace Engineering from the University of Texas at Austin, where he developed in interest in Guidance, Navigation, and Control (GNC) for Aerospace applications. At Stanford, Nick is pursuing his interest in GNC through Distributed Space Systems (DSS) research, advised by Professor Simone D'Amico. Nick's research involves the development of dynamics, guidance, and control strategies for RPOD missions in eccentric orbits, as well as creating reduced order modeling techniques to simplify formation flying mission design.

#### HONORS AND AWARDS

- Magna Cum Laude, University of Texas at Austin (May 2022)
- Russell U. Smith Family Endowed Scholarship, Russell U. Smith Family (2020-2021)
- William F. McCombs Scholarship in Aerospace Engineering, Cockrell School of Engineering (2019-2020)

#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Student Member, American Institute of Aeronautics and Astronautics (2022 - present)

#### EDUCATION AND CERTIFICATIONS

- Master of Science, Stanford University , Mechanical Engineering (2024)
- Bachelor of Science, University of Texas at Austin , Aerospace Engineering (2022)

#### PERSONAL INTERESTS

- Space Exploration
- Guidance, Navigation, and Control (GNC)
- Trajectory Design
- Sensor Fusion/State Estimation
- Distributed Space Systems
- Convex Optimization

#### LINKS

- LinkedIn: <https://www.linkedin.com/in/ndelurgio/>
- GitHub: <https://github.com/ndelurgio>

## Research & Scholarship

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### PROJECTS

- AIAA Student Space Design Competition - University of Texas at Austin (1/1/2022 - 5/1/2022)
- Space Force Aerospace Technology Gap Assessment - Center for Space Research - University of Texas at Austin (January 2021 - August 2022)
- Closed-Form Modeling and Control of Spacecraft Swarms in Eccentric Orbits - Space Rendezvous Laboratory (January 1, 2023 - present)
- Optimal Control for Minimum-Fuel Pinpoint Landing - Stanford University (January 1, 2023 - 6/19/2023)

## Professional

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### WORK EXPERIENCE

- Spacecraft GNC Intern - Rocket Lab USA (May 2021 - August 2022)
- Research Assistant - Autonomous Systems Group - University of Texas at Austin (August 2021 - May 2022)
- GNC Principal Engineer - Texas Rocket Engineering Lab - University of Texas at Austin (February 2020 - January 2022)
- Researcher - Space Rendezvous Laboratory (October 1, 2022)