

# Dominic P. Tanzillo

MATHEMATICS AND NEUROSCIENCE · INSTRUCTOR FOR SPACE MEDICINE

🏠 [DominicTanzillo.github.io](https://DominicTanzillo.github.io) | 📧 [DominicTanzillo](mailto:DominicTanzillo) | 🌐 [dominic-tanzillo](https://dominic-tanzillo) | 🐦 [@DominicTanzillo](https://twitter.com/DominicTanzillo)

## Education

### Duke University

B.S. IN MATHEMATICS AND B.S. IN NEUROSCIENCE

*Durham, NC 27708*

*August 2016 - May 2021*

- Cumulative **GPA of 3.95**
- Pursuing graduation with distinction in both mathematics and neuroscience.

## Honors & Awards

May 2020 **Phi Beta Kappa - Junior Admit**, Duke University

*Durham, NC 27708*

May 2019 **Student Marshall**, Duke University Graduation

*Durham, NC 27708*

2016 - 19 **Dean's List**, Duke University

*Durham, NC 27708*

## Work and Research Experience

### Duke University - Department Electrical and Computer Engineering

*Duke University - Durham, NC 27708*

RESEARCH ASSISTANT FOR PEARSON LAB

*August 2020 - Present*

- Developing novel online machine learning algorithms for real-time spike sorting.

### NASA Undergraduate Space Research Association - USRA

*Johnson Space Center - Houston TX*

SPACECRAFT SOFTWARE - RESEARCH ASSOCIATE

*January 2020 - August 2020*

- Contributed to Pilot Training Next Software for quantifying cognitive states of Air Force Pilots.

### Duke University School of Medicine - Department of Neurobiology

*Duke University - Durham, NC 27708*

RESEARCH ASSISTANT FOR DR. FAN WANG

*August 2017 - December 2019*

- Built maze and microcircuit to record neural activity in the trigeminal nuclei of mice.
- Received Summer Neuroscience Fellow grant to present on results at the Summer 2019 Duke Undergraduate Research Showcase.

### University of California San Francisco School of Medicine: Neurosurgery

*San Francisco CA, 94115*

UNDERGRADUATE RESEARCHER WITH DR. LARSON

*May 2017 - June 2018*

- Shadowed neurosurgery at the San Francisco Office of Veterans Affairs and watched UCSF neurosurgery grand rounds.
- Conducted research project for quantifying the error rate of a software used in Deep Brain Surgery.

## Publications

### Course: Space Health 101

*Duke University - Durham, NC 27708*

PUBLISHED THROUGH BAYLOR COLLEGE OF MEDICINE FOR THE TRANSLATIONAL INSTITUTE FOR SPACE HEALTH

*August 2020 - Present*

- Developed undergraduate curriculum for students to learn about the health hazards and practice of medicine in the space environment.
- Recorded lectures from House Course available on the TRISH Orbit Platform for anyone to be introduced to the field.

### Paper: Stereotactic and Functional Neurosurgery

*San Francisco CA, 94115*

CT AND MRI IMAGE FUSION ERROR

*August 2020*

- Second name paper based on Work from my time at UCSF.

## Student Organizations

### Duke Students for the Exploration and Development of Space

*Duke University - Durham, NC 27708*

FOUNDER AND PRESIDENT

*April 2020 - Present*

- Founded Duke's Branch of SEDS to bring together students interested in the engineering, medical, and policy needed for a future in space.
- Oversaw the development of the SEDS USA Space Health Platform to connect college students and researchers to develop astrobiology and bioastronautics research.

### Duke University EMS

*Duke University - Durham, NC 27708*

EMERGENCY MEDICAL TECHNICIAN AND CPR INSTRUCTOR

*September 2018 - Present*

- Volunteered at Duke Basketball and Football games and other large events as an EMT responding to event medicine emergencies.
- Worked in the Durham community, as an American Heart Association CPR and Stop the Bleed Instructor.

### Camp Kesem at Duke University

*Duke University - Durham, NC 27708*

COUNSELOR AND MAKE THE MAGIC DIRECTOR

*December 2016 - Present*

- Annually raised over **\$1000** to sponsor campers to attend Camp Kesem at Duke University's week of summer camp.
- Oversaw a 15 person team to organize the 2018 and 2019 Magic the Magic Charity Galas which earned over **\$41,000**.