

Evan Mahns

mahnsevan@gmail.com · 908-902-6788

LinkedIn: www.linkedin.com/in/evanmahns · 3 Todd Drive Eatontown, NJ 07724

Highly motivated and loves to learn. Currently in the Accelerated PhD program at RPI. Looking for new learning experiences in the Aerospace Industry.

WORK EXPERIENCE

RPI Center for Flow Physics and Control

Troy, NY

Undergraduate Research Assistant

June 2021 – December 2022

- Use NX for computer animated design, design different pieces to mount model to the wind tunnel's floor or wall, design cost effective, easy to assemble pieces capable of bearing the weight of the model
- Run low Reynold's number experiments in a Glycerin-Water Tunnel and studying how to control the separation of flow in wings with different sweep and taper angles at varying angles of attack using synthetic jets

EDUCATION

Rensselaer Polytechnic Institute (RPI), Troy, NY

BS: Aeronautical and Mechanical Engineering GPA: 3.55/4

September 2019 – May 2023

PhD: Aeronautical Engineering

September 2022 - Present

PROJECT EXPERIENCE

Three-Dimensional Separation of Swept and Tapered Wings – Rensselaer Polytechnic Institute (RPI), Troy, NY

Understand the effects of three-dimensional separation by varying parameters such as sweep, aspect ratio, Reynolds number, and angle of attack and observing how these parameters affect the flow field, particularly at low Reynolds numbers where there is a lack of experimental work in this regime.

Flow Control for Tailless Vehicle Aerodynamics During Takeoff and Landing via Leading Edge Vortex Manipulation – Rensselaer Polytechnic Institute (RPI), Troy, NY

Explore ways to control the onset, formation, and development of forebody vortices to, in turn, control the nose-up pitching moment contribution at moderate to high angles of attack during takeoff and landing, as well as lateral control in these flight regimes.

LEADERSHIP, HONORS, AND SKILLS

RPI Varsity Baseball Team: Pitcher – Help lead practices with the absence of an assistant coach due to COVID-19 Pandemic. Academic All-America, Two-Time Academic All-Liberty League.

Student Athlete Advisory Committee: Team representative for 2 years, vote on different community service opportunities for student athletes and rights of Student Athletes in the university.

Union Executive Board: VP of Student Athlete Relations. Allocate \$3.4M budget between the RPI Union Administration, clubs, and student activities. Arrange events to engage student athletes with the student union.

Order of the Engineer: Took an oath of a life-long obligation to hold ethics with purpose and pride during my professional engineering career.

Honors/Skill: Dean's Honors List, MATLAB, Python, Microsoft Office, Problem Solving, CAD, Mathematics, Numerical Programming, Nastran, Finite Element Analysis, Research