

PAUL REMNEFF

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P.O. Box 1091 Troy, NY 12181

EDUCATION

Aeronautical Engineering Ph.D., Rensselaer Polytechnic Institute Expected 2026
Research: Flow Physics and Control of Tailless Chined Forebody Delta Wing in Steady and Unsteady Ground Effect
Advisor: Prof. Michael Amitay

Mechanical Engineering, BS, University of Nevada, Reno 2017 - 2021
Minor in Mathematics and Physics

EXPERIENCE

Graduate Research Assistant Aug 2022 - Present
Center for Flow Physics and Control *Rensselaer Polytechnic Institute*

- Designing, setting up, and performing experiments in wind tunnels
- Designing models of flow control devices like synthetics jet devices, and vortex generators
- Calibrating active flow control devices such as synthetic jets
- Analyzing experimental results
- Operating experimental equipment including high powered lasers, Stereo Particle Image Velocimetry (SPIV), wind tunnels, and various measurement devices

Graduate Research Assistant Aug 2021 - Aug 2022
Thermal Hydraulics Lab *Rensselaer Polytechnic Institute*

- Performed computation fluid dynamic simulations of two-phase flow
- DOE sponsored project: Thermal hydraulic systems analysis usings RELAP5
- Reported results of research progress as well as presenting research material

Teaching Assistant Jan 2022 - Present
Fluid Dynamics, Flight Mechanics, Space Flight, and Computer Aided Design *Rensselaer Polytechnic Institute*

- Grading papers and exams
- Creating homework assignments and exam questions
- Instructing students during lab sessions or during office hours

PUBLICATIONS & PRESENTATIONS

- **Remneff ,P.**, Rojas Carvajal, T., Amitay, M., “Interaction of a finite span synthetic jet with a streamwise vortex.” Accepted in *76th Annual Meeting of the American Physical Society Division of Fluid Dynamics*, Washington, DC, Nov. 19-21, 2023.
- Rojas Carvajal, T., **Remneff ,P.**, Amitay, M., “Control of Vortical Structures over a Tailless Chined Forebody-Delta Wing configuration using Synthetic Jets.” Accepted in *76th Annual Meeting of the American Physical Society Division of Fluid Dynamics*, Washington, DC, Nov. 19-21, 2023.
- **Remneff ,P.**, Rojas Carvajal, T., Amitay, M., “Control of a Streamwise Vortex Using a Finite Span Synthetic Jet” AIAA-2024-0489, SciTech 2024, Orlando, Florida, January 8-12, 2024.

SKILLS

Technical Skills

Computational Fluid Dynamics, Finite Element & Numerical Methods
Computer Aided Design in Solidworks (CSWA) and NX
Geometric Dimensioning and Tolerancing (GD&T ASME Y14.5)
Particle Image Velocimetry, Hotwire Anemometry
Wind Tunnel Operations

Coding Languages or Programs

C, Python, Matlab/Simulink, Labview, LaTeX
Microsoft Office
Linux OS

Rotor wing and fixed wing flight experience

25.5 Hours TT

LEADERSHIP

- **President of the Nevada Rocketry Society:** Led a club to design a solid propellant powered rocket to enter into the intercollegiate rocket engineering competition (IREC). As president, I procured funding, made purchase orders for supplies, organized meetings, and delegated tasks to club members.

AWARDS

- Engineering Differential Scholarship 2019
- Mechanical Engineering Scholarship 2019

MEMBERSHIPS & ORGANIZATIONS

- A student member of AIAA since 2019
- Member of the Society of Physics Students 2019-2021
- Volunteered as a mentor for Big Brothers Big Sisters of Northern Nevada from 2018 to 2021.