

JACK C. OTTINGER IV

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EDUCATION

Rensselaer Polytechnic Institute: Troy, New York

- M.E. Aeronautical Engineering, advised by Professor Michael Amitay *August 2020 - Present*
- B.S. Aeronautical Engineering, 3.42 GPA *August 2017 - May 2021*

TECHNICAL SKILLS

Hands-on	Experimental Setup & Design, Mechanical & Aerodynamic Design, Metrology, Automotive Restoration & Modification
Modeling and Analysis	Siemens NX12, SolidWorks, Autodesk Inventor & Fusion360, Onshape, Matlab, Python, Paraview, MS Office, Latex

WORK EXPERIENCE

Center for Flow Physics and Control March 2021 - Present *Graduate Research Assistant*

- Graduate lead on project to study the low Reynolds number cases $Re = \mathcal{O}(10^2 - 10^3)$ of 3D flow separation over 3D trapezoidal wings with cross section of NACA 0015 at high stall angles.
- Supervised the design and fabrication of models and mounting assemblies for water tunnel testing.
- Experimental techniques used: Stereoscopic PIV, Volumetric Data Processing.

Stewart-Haas Racing, NASCAR Cup Series Team January 2020 - August 2020 *Aerospace and Metrology Engineer - Coop*

- Operated an ATOS blue-light 3D scanner to create high-resolution, 3D models of each NASCAR race car for surface comparisons with ideal aerodynamic models with tolerances up to ± 0.0005 inches for wind tunnel test cars and cars headed to the race track.
- Improved full-car scanning techniques to decrease car-scan time by up to 25% by moving alignment points off the physical scan plate and into virtual space. This new process saved up five man-hours per week and simplified the alignment process, while simultaneously improving data quality and decreasing alignment errors.

Digi-ata Digital Dash Solutions May 2020 - Present *Founder* *Website: digiata.site*

- Designed and manufactured digital dashboard mounting solutions for various classic car models using CAD software, Python programming language, and electronics design to provide a more data-driven racing experience.
- Ensured customer satisfaction and retention through website design, marketing, and domestic & international fulfillment

LEADERSHIP AND OUTREACH

Eagle Scout September 2016

Rensselaer Student Auto Shop Manager September 2018 - Present

- Supervised student automotive projects to ensure safe use of facilities and maintain proper vehicle operation.

Sports Car Club of America March 2019 - Present

- Modified personal car for competitive STS-class autocross racing and participated in non-competitive track days to improve driving skills at higher speeds.

Theta Chi Fraternity Delta Chapter House & Kitchen Manager December 2017 - Present

- Implemented and coordinated repairs and managed food and appliance orders for the fraternity.