

Victor Petitgenet

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EDUCATION

Georgia Institute of Technology:

- M.S. in Aerospace Engineering, Class of 2021, GPA: 4.0/4.0
- B.S. in Aerospace Engineering, Class of 2019, GPA: 3.83/4.0 (AE Honors Program, Dean's List)

PROFESSIONAL EXPERIENCE

Momentum - System Engineer III

February 2021 - Present

- Lead Systems Engineer for the Vigoride 6 mission (launched Transporter-7, Apr. 2023)
 - Responsible for delivering a vehicle which meets the technical mission requirements
 - Leading anomaly investigation/resolution
 - Leading technical readiness reviews
 - Producing deliverables for launch provider and regulatory agencies
- Participating in design efforts for rendezvous and proximity operations (RPO) demonstration mission
 - Responsible for adapting an automotive grade LIDAR for use in space
 - Developing and executing test plans for RPO sensors
 - Generation of synthetic training data for ML algorithms
 - Developing mission CONOPS
- Designed <\$300 dark sky simulation GSE for star tracker testing on the bench and on the vehicle

Aerospace Systems Design Lab - Graduate Research Assistant

August 2019 - February 2021

- Participated in industry-centered academic research efforts in the field of aerospace systems engineering
 - Simulation of pulsed RCS operation during planetary entry
 - Framework for the evaluation of Urban Air Mobility System-of-Systems
- Identified specific technical problems to solve based on prompts from industry stakeholders
- Presented technical findings to industry stakeholders during reviews and conferences
- Published technical findings in industry conference papers

Aerion Supersonic - Systems Engineering Intern

May 2020 - August 2020

- Created and managed requirements for the AS2 aircraft
- Developed a python-based ETOPS analysis code for the AS2 aircraft

NOTABLE PROJECTS & RESEARCH

Nuclear Thermal Propulsion (NTP) Design Space Exploration

Fall 2019 - Fall 2020

- Developed and implemented a novel methodology for the coupled design space exploration of NTP systems in tandem with Georgia Tech's Nuclear Engineering Department
- Lead publication of paper to AIAA P&E conference (August 2020), 1st author

Yellow Jacket Space Program

Fall 2017 - Spring 2019

- Student led initiative to launch liquid fueled rocket carrying 10kg payload above 100km
- Created aerodynamic heating simulation allowing for 1st order skin temp estimation
- Performed uncertainty propagation to quantify the uncertainty of the rocket's position in flight
- Developed mission and vehicle requirements

SKILLS

Professional: Technical Presentations, Cross-Functional Communication, Leadership

Academic/Technical: Core Aerospace Engineering, FEA, Robotics & Autonomy, Systems Engineering

Programming: MATLAB, Python, VBA

Software: SolidWorks, Microsoft Office Suite, Simulink, Jira, XFoil, Abaqus, OpenVSP, Jama, FreeFlyer, JMP

Languages: English (fluent), French (fluent), Spanish (conversational)