# TED R. VLADY

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U.S. Citizen

## EDUCATION

**GEORGIA INSTITUTE OF TECHNOLOGY, College of Engineering** **Atlanta, Georgia**
**Bachelor of Science in Aerospace Engineering** *December 2020*

- Minor: Engineering & Business through the Denning Technology & Management Program GPA: 4.0
- Georgia Tech Aerospace Engineering BS/MS Honors Program
- Shenzhen University Global Leadership Program *March 2019*

## EXPERIENCE

**GENERAL ELECTRIC AVIATION** **Hooksett, New Hampshire**
***Supply Chain Management Intern / Environmental Health and Safety (EHS)*** *May – August 2019*

- Identified a workplace electrical hazard and implemented an engineering solution in line with EHS quarterly goals that generated an annual net cash flow of $3,000 after 3 years due to contractor labor savings
- Developed an Excel macro to interface with online building management system for data analysis and report generation that reduced daily and quarterly management commitment by 50%
- Designed and deployed a new EHS program regarding Creform modular structures that included 15 engineering design requirements, 10 monthly audit guidelines, and an active sitewide database

**HONEYWELL AEROSPACE** **Tempe, Arizona**
***Environmental Controls Systems Engineering Intern*** *May – August 2018*

- Designed 20 requirements related to operating modes that allowed the product to function based on customer specifications
- Validated 5 requirements regarding the overtemperature of the system by requesting and analyzing 10 MATLAB Simulink dynamic simulations and creating a report to summarize the results to the customer
- Utilized steady-state analysis to find temperature boundary conditions so that conditions can be run in dynamic analysis

**GEORGIA INSTITUTE OF TECHNOLOGY** **Atlanta, Georgia**
***Undergraduate Researcher / Aerospace Systems Design Laboratory (ASDL)*** *August 2017 – Present*

- Modeled a 5000-horsepower turboshaft engine in a custom NPSS environment for use in a hybrid electric propulsive system and optimized engine parameters based on expected technology levels in 2030
- Created a manufacturing model of a small drone fuselage using SEER MFG to find optimal manufacturing processes that cut down the cost per unit by 7%
- Researched ceramic matrix composites (CMCs) and their manufacturing techniques to investigate possible use in airframes and other components such as wings and tails

## PROJECTS

**GEORGIA INSTITUTE OF TECHNOLOGY** **Atlanta, Georgia**
***Team Leader / AIAA Team Engine Design Competition*** *December 2017 – May 2018*

- Modeled a Supersonic Variable Cycle Turbofan Engine in Numerical Propulsion System Simulation (NPSS) and Weight Analysis for Turbine Engines (WATE) and ran trade studies on the engine cycle by creating carpet plots of engine variables
- Optimized thrust specific fuel consumption by 8% and engine weight by 8% leading to an overall increase in range by 12%
- Designed compressors and turbines with an average 20% increase in pressure ratio and 15% decrease weight
- Managed timelines that prevented delays and allowed effective flow down of design requirements to 6 design subgroups

## LEADERSHIP

**GEORGIA INSTITUTE OF TECHNOLOGY** **Atlanta, Georgia**
***PLUS Leader & Mentor / Center of Academic Success (CAS)*** *August 2018 – Present*

- Plan and hold semiweekly review sessions for 10+ PHYS I students to reinforce critical thinking skills and study habits
- Manage 7 PLUS leaders throughout the semester holding biweekly group meetings and semesterly performance evaluations
- Developed semiannual training curriculum in a team of 5 for use during CAS new hire training

## SKILLS/INTERESTS

**Technical:** NPSS, WATE, Turbomachinery design, SOLIDWORKS, MATLAB, Java, C++, AutoCAD, MS Office
**Languages:** Bulgarian – working proficiency, Spanish – limited working proficiency, English – native
**Awards:** Dean's List: Fall 2016 – Spring 2018, Faculty Honors: Fall 2016 – Spring 2018
**Volunteer:** Matthew 25 Ministries, Bulgarian Association of Cincinnati
**Interests:** Gas turbine engines, data analytics, swimming, rocketry