GT-AIAA: Diverse Perspectives and Increased Engagement

Ashish Cavale¹ and Ruhani Prasad²

Georgia Institute of Technology, Atlanta, GA, 30332, United States of America

I. Summary

The American Institute of Aeronautics and Astronautics (AIAA) student branch at the Georgia Institute of Technology (GT-AIAA) stands out for its exceptional contribution to enhancing student engagement and professional development in the aerospace industry. Over the past year, GT-AIAA's Executive Board has dedicated its initiatives to increasing engagement and providing students with a diverse array of opportunities, directly contributing to a substantial increase in student involvement in aerospace research, exposure to engineering leadership, and, consequently, participation in the AIAA Region II Student Conference.

Our industry and career exposure initiatives encompassed a series of hiring and info sessions featuring prominent entities such as General Atomics, Kratos Defense and Security Solutions, Parsons, Blue Origin, SpaceX, Aurora Flight Sciences, and the Societies of Experimental Test Pilots and Flight Test Engineers. These sessions introduced fields of study that are not encountered until late in a typical undergraduate curriculum, priming first-year students to learn how to shape their academic curriculum at Georgia Tech. To make a larger impact on its members, GT-AIAA co-hosted an all-day Career Fair Preparation event to be more engaged with our members' needs. Having GT-AIAA assist our members from hosting info sessions to interview preparation shows GT-AIAA's commitment to building a stronger community within the branch and providing inclusive assistance to the branch's diverse body of first-years, international students, and students from other diverse backgrounds. GT-AIAA is also known to host industry-focused events that educate our members through engaging formats. The Lockheed Martin Case Study event has been an annual GT-AIAA tradition since 2018. By inviting Lockheed Martin engineers who spend hours preparing creative and educational real-world case studies, GT-AIAA members actively participate in critical thinking and innovative problem-solving that an engineer in industry typically encounters.

The branch had its largest impact through its commitment to bringing diverse and passionate speakers to our members. Each speaker was specifically chosen to address a diverse range of interests in our branch. Alice Bowman's talk about her role as New Horizons Mission Operations Manager at NASA was widely attended by our members who were actively involved in the mission operations for the Lunar Flashlight satellite or by those who wanted to hear first-hand experience about the revolutionary New Horizons mission. Eugene Fleeman described his role as a missile design expert and his involvement as the Chair of the Missile Systems Technical Committee in AIAA. Michael Gazarik's talk on "Navigating Your Engineering Career with Confidence and Joy" was GT-AIAA's most popular event this year. This talk encouraged members to introspectively think about their future goals and leadership strategies while teaching the branch about aspects of engineering management such as radical candor, emotional intelligence, servant leadership and much more. Lastly, GT-AIAA worked with its advisor, Dr. Mavris, to start the branch's largest campaign to promote undergraduate research and conference participation. Dr. Mavris and the GT-AIAA Executive Board met students (mostly first and second years) at GT-AIAA's kickoff meeting to provide contacts, resources, and advice about the vast amount of research opportunities available. Concurrently, GT-AIAA's Executive Board successfully reached out to research labs and student organizations about the opportunity and benefits of participating in a conference. As a result, GT-AIAA's presence at the 75th AIAA Region II Student Conference has increased from an average of seven students to fifty-three students, emphasizing GT-AIAA's increased sense of community and involvement throughout the past year.

GT-AIAA has demonstrated its ability to elevate the standards of Georgia Tech's aerospace program and professional development through these diverse initiatives. The branch's efforts have not only bridged the gap between theoretical knowledge and practical application but have also laid a solid foundation for the next generation of aerospace leaders. GT-AIAA aims to share its successful model with the broader AIAA community, contributing to the collective goal of exposing more college students to diverse perspectives in the aerospace community.

¹ Undergraduate Student, Department of Aerospace Engineering, AIAA Student Member, 1158431

² Undergraduate Student, Department of Aerospace Engineering, AIAA Student Member, 1304082