During the semester spanning from August to December 2023, VantTec, the esteemed student group at Tec de Monterrey's Monterrey campus, remained dedicated to its mission of designing, building, and programming autonomous unmanned vehicles (AUVs). This period was marked by a series of impactful events, collaborations, and engagements that not only showcased VantTec's technical prowess but also underlined its commitment to fostering innovation and knowledge dissemination.

One significant aspect of VantTec's outreach efforts was the engagement with prominent enterprises and institutions. Notably, the group hosted visits from esteemed entities such as ZF Group, Rice University, and E80 Group. These interactions provided a valuable platform for VantTec members to discuss ongoing projects, share insights into the future trajectory of the group, and explore potential collaborations. The exchange of ideas with these industry leaders served to enrich the group's understanding of real-world applications and industry demands.

In addition to industry engagements, VantTec actively participated in seven key events organized by Tec de Monterrey. Among these, INC Monterrey, a prominent entrepreneurship festival in Latin America, stood out as a flagship event. Here, VantTec had the opportunity to exhibit its cutting-edge technologies, providing a glimpse into the group's developmental journey. Moreover, the group actively contributed to six other events hosted at Tec de Monterrey, including Redspot, OpenHouse, B-Tec, Entrepreneurship and Technology, Itera, and Movie Projection. These events served as platforms for VantTec to showcase its projects, interact with the broader student community, and demonstrate its commitment to technological innovation.

Beyond these events, VantTec embarked on an impactful educational initiative by offering a small course to high school students. The course focused on introducing the young minds to machine learning and basic Python programming, culminating in the creation of a self-driving Mario Kart game. This initiative not only showcased VantTec's commitment to knowledge dissemination but also aimed to inspire the next generation of engineers and technologists.

VantTec's impact during this semester transcended the boundaries of its campus, culminating in a noteworthy demonstration of its autonomous car for the 80th-anniversary celebration. This special event served as a recognition of the group's dedicated efforts over the past year, focused on achieving autonomous driving in a golf car for providing campus tours. The autonomous car showcased the tangible results of VantTec's commitment to innovation and its one-year goal accomplishment.

In essence, VantTec's community and outreach activities during the semester were characterized by a multifaceted approach. From industry collaborations to educational initiatives and international competitions, the group demonstrated its commitment to excellence, knowledge-sharing, and inspiring the future generation of engineers. By putting Tec de Monterrey on the international map, inspiring aspiring engineers, and contributing to the advancement of autonomous vehicles, VantTec solidified its position as a trailblazer in the realm of robotics, automation, and artificial intelligence. As VantTec continues to push boundaries, it remains a beacon of innovation within the Tec de Monterrey community and beyond.

## Supporting images:



















