Student name: Johann Hamen

Academic level: BS Mechanical Engineering Virginia Tech

Impact Statement:
I am a continuing student in mechanical engineering focused on automotive engineering. During this project I spent my time wiring e stops and modifying the air brake system. I added solenoids and controllers to ensure the service brakes and parking brakes applied when an emergency stop was initiated. I expanded my knowledge on pneumatic air systems and implementing electrical systems into vehicles. This experience has increased my understanding of automotive engineering and will help me excel in future classes.

Student name: Daniel Burdisso

Academic level: BS Computer Science Virginia Tech

Impact Statement:
I worked on the ATMA project as a student before graduating in 2022. During this time, I spent most of my work on machine vision applications using NVIDIA applications for lane line detection and tracking. I assisted in retrieving the distances from the camera position to the detected lanes and then converting them to ratios for the ATMA's steering control so that it would stay in the lane behind the lead vehicle when using a vision-based integration. In addition, I assisted in data collection and analysis to test and improve the system in being able to follow the lead more accurately and smoothly. During this process, I gained skills in machine vision applications, OpenCV, ROS, and C++.