Student name: Peng Jiang
Academic level: PhD
Thesis/dissertation title: *Development of an AI-Powered Framework to Mitigate Security Risks in Autonomous Vehicles*
Impact Statement:
“My Ph.D. dissertation focuses on applying machine learning techniques to resolve various security issues in self-driving vehicles, including GPS spoofing attacks. My research experience aligns with the goal of the SAFE-D project. i.e., identifying the sensor degradation in the modern ADS system. This project investigates the possible degradation in multiple sensors, such as LiDAR, Radar, and GPS modules. Participation in the SAFE-D project enabled the chance for me to work with a group of research experts from VT who excelled in ADS to develop the algorithms collaboratively. This research experience allows me to understand the comprehensive sensor suites in the real-world self-driving vehicle, which is beneficial to me in assessing critical security issues in Autonomous Vehicles.”