



## **Centre for Autonomous Vehicles**

### **Internship Modules for Engineering students**

- M1. Sensor Fusion of LIDAR and Camera for object detection and tracking
- M2. Learning based Image deblurring/super resolution algorithm on real time embedded hardware
- M3. Impact simulation of battery pack as per AIS 048 safety standards
- M4. Thermal simulation of battery and motor
- M5. Radar data analysis using ML
- M6. Lidar Data analysis using ML
- M7. Image data analysis using ML
- M8. Iris detection using ML
- M9. Collision avoidance system
- M10. DL models for automatic camera image annotation
- M11. Determination of Braking load for a various two and four wheeler.
- M12. Design of Electronic part of brake by wire system
- M13. Design of Test Bed for Brake wire braking system
- M14. Traffic Sign Recognition System
- M15. Distronic System for Driver Assistance
- M16. Tyre Health Monitoring System
- M17. Blind Spot Assist System
- M18. Adaptive Intelligent Lightning System
- M19. Powertrain Simulation in MATLAB
- M20. Simulation of Brushless DC Motor Characteristics in MATLAB
- M21. Electronic Steering System
- M22. Implementation of a method/technique to Summarize Video
- M23. Moving Object Detection and tracking in Videos
- M24. Automatic Image extraction from Video
- M25. Comparative Study of Simulators for Autonomous Vehicles
- M26. Study of different thermal management systems for effective battery cooling
- M27. Vehicle detection using different CNN models
- M28. Implementation of various object detection techniques
- M29. Performance analysis of different Activation function using FRCNN on DOTA dataset
- M30. Comparison of different segmentation algorithm for vehicle detection
- M31. Comparison of preprocessing techniques for vehicle detection
- M32. Performance analysis of object detection techniques namely CNN, RCNN, FRCNN, SSD, YOLO
- M33. Design of Safety Critical Application for autonomous car
- M34. Application of GD&T for automotive design

**For Further Information Contact:**

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