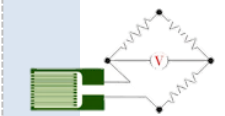




Signal Processing
Application for
Measuring Device
using Strain Gauge



01

02

03



Audio/Video Streaming Engine &
Packet Loss Recovery Mechanism for
Video Conference System



Video Streaming Engine &
Fault-Tolerant 802.11 Wi-Fi Driver for
Surveillance system : Video Recorder



MP3/DVD Player Application for
DVD Recorder



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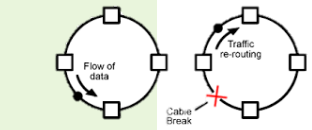
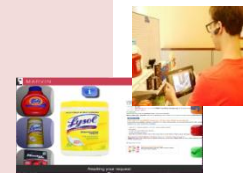
Qt application to teleoperate UGV and UAV &
System Integration using ROS for
Unmanned Ground and Air Vehicle Collaboration



Motion Planner Integration using
ROS for CMU's Home Exploring
Robot Butler (HERB)

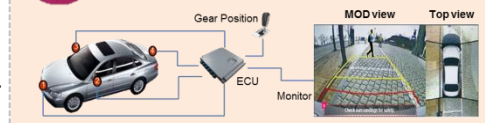
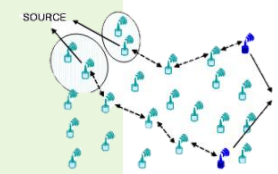


3D Camera Localization Module &
System Integration for Multimodal
Sensing (Video, Audio, and
Location) Project

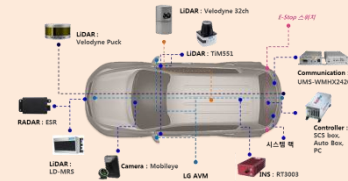


Fault-Tolerant Token-Ring Control
Network for Nuclear Power Plant

Energy Efficient Routing Protocol for
Wireless Sensor Network



Vision Algorithms for
2D Surround View Monitoring System



Perception Module &
System Integration for
LG Autonomous Vehicle

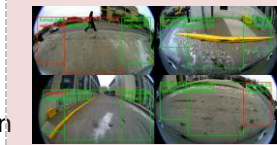
'14

'15

'16



Electrical & Computer
ENGINEERING



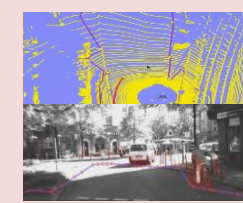
Multi-camera-
based moving
object detections



Vision Algorithms for
Adaptive 3D
Surround View



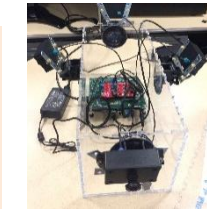
RGB and Thermal-based
Object Detection



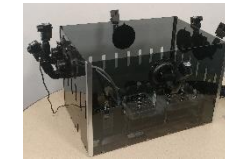
LiDAR-based
Road-edge
Detection



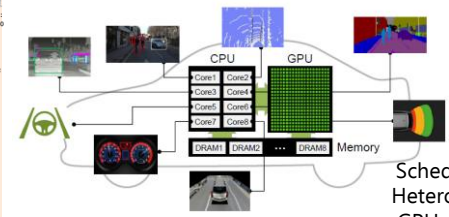
LiDAR and
Camera
association



TI TDA 2x based
Multiple Camera
Platform



NVIDIA Drive PX2 based
Multiple Sensor Platform



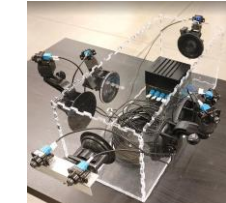
Scheduling for
Heterogeneous
GPU workload



Stereo RGB / Thermal Camera
Test Prototype

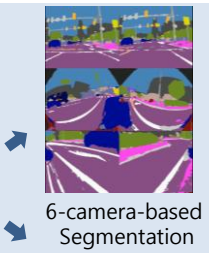


Side Ultrasonic
Sensor
Prototype



NVIDIA Jetson Xavier based
Multiple Sensor Platform

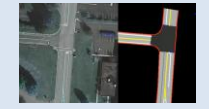
Stealth Mode
Startup



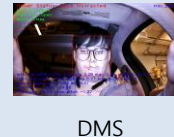
3D Object Detection



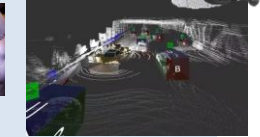
ONNX
Quantization



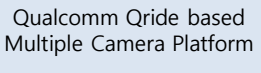
Bird-eye-view
Road Marker Detection



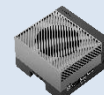
DMS



VR-based 3D labeling



Qualcomm Qride based
Multiple Camera Platform



Jetson AGX Platform

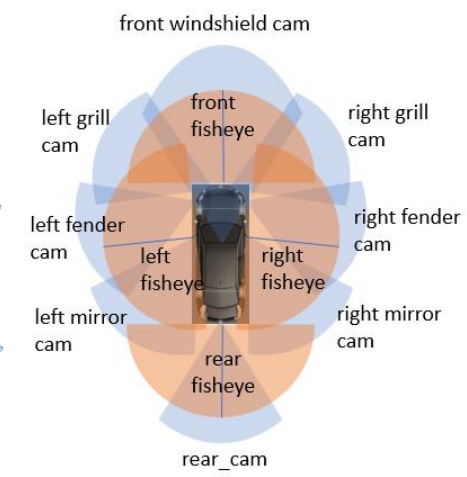
'22

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Multi-Vision Sensor for
Self-driving car



Camera-only Perception