

## DEVELOP ADAS AND AUTONOMOUS DRIVING CAMERA TECHNOLOGY

## **OBJECTIVES**

■ Develop advanced driver-assistance systems and autonomous driving technology using camera sensors to include features like lane, object, and scene detection; automatic emergency braking; and automatic high beam control

## **MAIN TASKS**

- Elicit and negotiate client requirements
- Perform requirements engineering to establish full traceability in DOORS
- Plan development activities for individual features and report feature status to APL/Project
- Create and maintain software requirements
- Design, implement, and test ADAS algorithms based on client and internal requirements
- Implement ADAS algorithms in Simulink and generate code with MATLAB Coder
- Perform MIL and SIL tests, MIL and SIL tests on-bench (monitor HIL), unit tests, and software quality tests

## **KEY TOOLS & TECHNOLOGIES**

- Simulink
- IBM DOORS
- MATLAB
- Visual Studio
- Embedded C
- EyeQ client

- Python
- AUTOSAR
- CANoe
- Trace32
- PTC Windchill