



Visteon®

Shift your career into high gear

Requisition Number: 12589

Post Date: May 1, 2017

Title: ADAS Software Expert for ROS and Target Development

City: Sofia

Country: Bulgaria

Description: ADAS Software Expert for ROS and Target Development – Sofia, Bulgaria

About Visteon

Visteon is a global technology company that designs, engineers and manufactures innovative cockpit electronics products and connected car solutions for most of the world's major vehicle manufacturers. Visteon is a leading provider of instrument clusters, head-up displays, information displays, infotainment, audio systems, telematics and SmartCore™ cockpit domain controllers. Visteon also supplies embedded multimedia and smartphone connectivity software solutions to the global automotive industry. Headquartered in Van Buren Township, Michigan, Visteon has approximately 10,000 employees at more than 40 facilities in 19 countries. Visteon had sales of \$3.16 billion in 2016. Learn more at www.visteon.com.

Visteon is an equal opportunity employer committed to a culturally diverse workforce.

Our Vision

A top-three cockpit electronics player delivering a rich, connected cockpit experience for every car from luxury to entry

ADAS SOFTWARE EXPERT FOR ROS AND TARGET DEVELOPMENT – SOFIA, BULGARIA

Primary Responsibilities

- Specification and documentation of ROS environment with system and requirements engineers
- Specification and documentation of target environment with framework, system and requirements engineers
- Specification and documentation of SIL and HIL environments with framework, system and requirements engineers
- Development of ROS and DDS interfaces inside Matlab/Simulink models
- Creation and maintenance of URDF files for ROS
- Specification, creation, maintenance and documentation of rviz plugins for ROS messages
- Analyzing of trends in the simulation environment market and open source approaches
- Update, configuration and set up of the SIL and HIL systems
- Adaptation connecting of SIL and HIL environments to the simulation environment

- Adaptation of SIL and HIL environments to work with different log files and allow automated runs
- Creation and maintenance of simulation environments to simulate target behavior and limitations

Additional Functions

- Specification and definition of middleware messages
- Specification of the middleware configuration
- Implementation of Matlab/Simulink interfaces to ROS and DDS
- Adaption of the Matlab/Simulink to develop realistic models

Typical Duties

- Algorithm development for vehicle control tasks: object avoidance, lane change, emergency automatic brake, etc.
- Identification and simplification of system model (vehicle model – transfer functions)
- Implementation and validation of driver model loop
- Design, implement and tune motion controllers
- Support vehicle testing, debugging and tuning efforts
- Prototype development in ROS environment

Requirements

Degree Strongly Preferred: University degree in computer engineering, automation engineering, electrical engineering or similar

Desired Competencies/Experience

- Very good C/C++ know-how, preferable in embedded/automotive area
- Very good Matlab/Simulink know-how and the usage of the embedded coder
- Experience in developing and debugging object-orientated software in a real-time, embedded, multi-processor, multi-interface environment, preferable in automotive area
- Experience with Agile development, test driven development and continuous integration
- Knowledge of MISRA coding guidelines
- Familiar with development environments like ROS
- Fluent in English language
- Experience with QNX and Linux operating systems
- Experience with DDS and its usage in different operating systems
- Knowledge of V-model based development and functional safety standards
- Research and/or development experience in robotics, automated driving and distributed systems
- Experience being in feature teams using Agile / SCRUM methodologies
- Self-motivated / self-starter with the ability to find creative solutions
- Experience with working in global teams

Apply for this Position

If you are interested in applying for this position, send your resume to pross1@visteon.com, and include the requisition number in the subject of your email.