Job Description

Intelligent Vehicle Advanced Development Engineer-IVS 14-AA-098

Description

Toyota Motor Engineering and Manufacturing North America, Inc. (TEMA)
TOYOTA TECHNICAL CENTER (TTC)

The Intelligent Vehicle Advanced Development Engineer position is in Integrated Vehicle Systems (IVS) Department located at our Ann Arbor, MI campus.

The responsibilities of this position include, but are not limited to:

Summary:
The Integrated Vehicle Systems (IVS) Department is developing a series of next-generation advanced driving assist systems (ADAS) for North America. IVS is validating the systems’ concept and performance requirements for NA using prototype systems and vehicles.

This engineer will fulfill our needs (1) to develop and integrate both hardware and software components into Toyota’s prototype vehicles, (2) to validate those components through simulation, lab, and vehicle tests, (3) to maintain and update those components (4) to report findings and document procedures, and (5) to make recommendations to all Toyota stakeholders.

Responsibilities Include:
- Identify North American concepts, functional and performance requirements for next-generation driving support systems.
- Develop, implement and validate software components for Toyota’s prototype vehicles.
- Plan and execute vehicle-level system and application validation tests; leading both vehicle data collection and reporting.
- Create system proposals with a customer-first mindset.
- Demonstrate working prototypes to upper Toyota management.
- Support software development process, structure, libraries, and laboratories.
- Document technical procedures related to software and hardware integration.
- Coordinate and execute engineering tasks with North American and Japanese staff.

Qualifications

Required:
- BS in Computer Science/Engineering, Electrical or Mechanical Engineering, or related discipline required.
- Strong background in software development and implementation using C++, Linux, Java, UML, or Python required
- Project-based experience in professional or academic environment relating to automotive, robotics, or related fields
- If Toyota employee applicant, must have acceptable job performance of “meets expectations” or “exceeds expectations” in both process and results on previous PMP
- A valid driving license with under 3 moving violations and accidents (combined) in the most recent 3 years

Preferred:
- MS in Computer Science/Engineering, Electrical or Mechanical Engineering, or related discipline
- Hands-on experience integrating radars (77GHz, 24GHz), cameras (mono, stereo), GPS, digital maps, ultrasonic, lidars, or wireless communication (DSRC, Bluetooth, WiFi) technologies preferred.
- Software development and implementation related to prototype driving support systems (e.g., adaptive cruise control, lane keeping assist)
- Experience in CAN, Flexray, Ethernet, LIN, OBDII, and other vehicular networking protocols preferred.
- Automotive development experience in professional environment (full-time, internship, Formula SAE, etc.)

Why work for Toyota?
- Join a team working to lead the future of mobility by enriching the lives around the world with the safest and most responsible ways of moving people
- Learning is a continuous, company-wide process with exciting opportunities for your career growth and development
• Become part of a company committed to maintaining a work culture where differences are respected, where fresh ideas and creativity are nurtured and where opportunity is critical for success
• We're committed to our team members. If you're highly motivated, creative and enjoy working with a cross functional team to influence the research and development of our products, then TTC may be right for you

Some of Toyota’s outstanding benefits:

• Competitive salaries
• Comprehensive health care plans
• Paid holidays and paid time off
• Vehicle Purchase and Lease Programs
• Flexible work schedules
• Relocation for qualified moves
• Employee recognition and Company/Team events
• Tuition assistance and professional development programs
• Retirement Plans: 401(k), Pension, Post-retirement medical options
• Lifestyle (varies by location): On-site credit unions, fitness facilities

About Us:
Toyota Technical Center (TTC) is a division of Toyota Motor Engineering & Manufacturing, North America Inc., established in 1977. TTC’s Michigan R&D facilities are located in Ann Arbor, Saline, Plymouth and Livonia. In addition, TTC has testing facilities in Torrance and Gardena, California and a 10-mile oval test track in Wittmann, Arizona.

TTC is engaged in engineering design, prototype building, vehicle evaluation and engineering, materials engineering, powertrain tuning and design, safety/crashworthiness, regulatory affairs and advanced research. TTC has development responsibility for the Avalon, Camry, RAV4 EV, Sienna, Tacoma, Tundra and Venza.

Toyota is an Equal Opportunity Employer and supports a diverse and inclusive workplace.

Job Engineering
Primary Location US-MI-Detroit/Ann Arbor-Ann Arbor
Organization TTC - Toyota Technical Center
Travel Yes, 10% of the Time
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