

# The Future of Automotive Innovation

The Judge Group is a premier technology partner for the automotive industry, offering a comprehensive suite of advanced virtualization and engineering solutions that accelerate development, streamline operations, and drive innovation. Our services empower automotive companies to efficiently follow the shift-left philosophy, enabling them to design, develop, test, and deploy complex systems early in the cycle.

## TRANSFORM HARDWARE DEVICES INTO VIRTUALIZED MODELS WITH ARM AND JUDGE

Judge has partnered with Arm to establish the Arm Virtual Hardware Center of Excellence. By combining Judge's technology expertise with Arm's advanced virtual hardware, we offer powerful new possibilities for your business. Additionally, we are collaborating with SOAFEE SIG members to drive innovation in the automotive industry. Together, we will leverage our technical prowess and innovative solutions to align with SOAFEE's vision, propelling the automotive industry toward unprecedented growth.

### **BENEFITS OF EMBEDDED DEVSECOPS**

- **Software:** Set up easy-to-use web and command-line tools with automated CI pipelines.
- Toolchains: Integrate with popular platforms like GitHub, GitLab, and Bitbucket.
- **Services:** Benefit from integration with Ceedling, Catch2, and Google Test Empower, along with comprehensive DevSecOps training.
- Configure: Create a cohesive environment for efficient collaboration.
- Automate: Ensure consistent and reliable software delivery.
- Build: Simplify the build process and focus on delivering quality.



Accelerated IoT & AI/ML Software Investments



Speed to Market Advantage



Freedom from Reliance on Hardware Availability



#### **AUTOMOTIVE CAPABILITIES**

- Semiconductor Solutions: Hardware, SoC (System on Chip), IP (Intellectual Property), Sensors and Actuators, Communication Bus and SoC Virtualizations
- ShapeVirtual ECU and MCU Services: Virtual ECU Abstraction, Multi-ECU Simulation, Virtual MCU and SoC Models, Technology Integration, Ecosystem EnablementShape
- Engineering Tools: Simulation Validation Tools & InfrastructureShape
- Cloud Solutions: Cloud Deployment, Big Data and InfrastructureShape
- Middleware Solutions: Software
   Applications/Models, Hardware Abstractions/
   Drivers, Middleware Services
- Software Services: Embedded Software Development, Application Development, Software Testing and Validation, Cybersecurity Solutions
- Al & Machine Learning Applications:
   Predictive Maintenance, Advanced Driver
   Assistance Systems (ADAS), Data Analytics
   and Insights, Autonomous Driving Simulations
- Safety Compliance: ISO Functional Safety (ISO 26262) adherence, Requirement Driven Verification including Unit Testing (UT), Functional Testing (FT), and Model-in-the-Loop (MIL) testing

### WHY CHOOSE THE JUDGE GROUP?

- Expertise in Automotive Solutions: Our team has extensive experience in the automotive industry, delivering innovative solutions tailored to your needs.
- Focus on Functional Safety and Compliance: We adhere to industry standards like ISO 26262, ensuring high reliability and performance.
- End-to-End Development and Virtual Prototyping: We cover the entire development lifecycle, using virtual prototyping to reduce time and costs.
- Cost and Performance Optimization: We streamline processes to enhance performance and reduce expenses.
- Established Partnerships: Our strong partnerships with leading technology providers give you a competitive edge.
- Proven Track Record and Flexibility: We have a proven track record of success and adapt to your changing requirements.



Partner with The Judge Group to leverage industry-leading virtualization, cloud deployment, and engineering tools to drive your automotive projects forward.



Visit Judge.com/automotive to learn more about how Judge can help drive your automotive projects forward.







