ARE YOU AN
MECHANICAL/
ELECTRICAL/
ELECTRONICS/
COMPUTER
ENGINEERING STUDENT ?

SHAPE UP YOUR SKILLS
IN COMPETITIVE
EMBEDDED DOMAIN
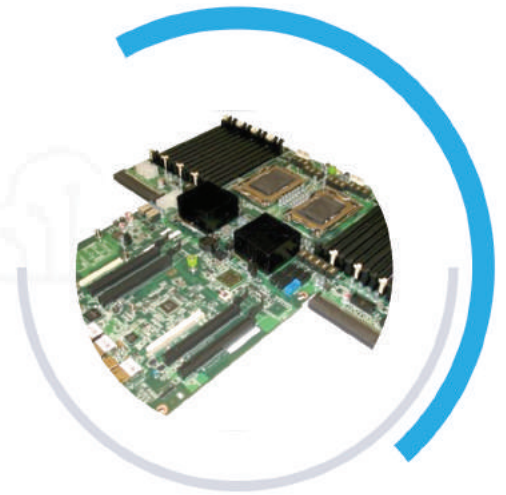
TEKLabs Inc
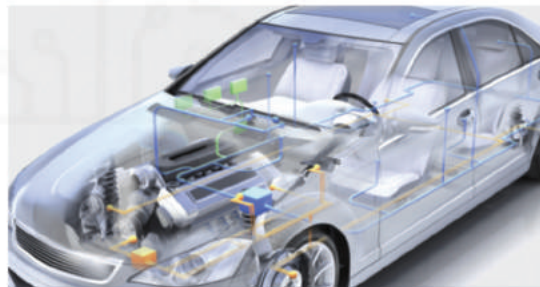
Kindling the Thirst for Knowledge

Learn/Practice/Innovate/Master you skills in
Advanced Embedded Systems

Embedded Software Testing and Tools Training
(HIL/MIL/SIL)

- Hardware In Loop
- Model In Loop
- Software In Loop

Aerospace

Automative

Medical

Industraial Automation

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Overview on Software Development Cycle

- Agile software development vs traditional software development

Requirements Management and Configuration Management Tools

- Configuration Management Tools (Synergy CM)
- Requirement Management Tool – DOORS

Communication Protocols and Tools in Embedded Systems

- CAN Protocol
- LIN Protocol
- MOST Protocol
- Flexray Protocol
- CANalyzer and CAN dB++ tools are used in live demo class.
- Vehicle Spy, and Diagnostic services Demo

Embedded Software Testing and Tools

- Basics of Control Systems
- MATLAB, Simulink hands on training
- Verification vs Validation
- Tyres of HIL Vendors
- Rapid prototyping
- Mid-size vs Full-size vs Micro Auto Box

- Plant model vs Controller model
- dSPACE plant model Integration
- Plant model and control desk mapping
- HIL Application is real-time scenarios
- Basics of Calibrations
- Temperature measurement using Ipetroniks

- Electrical architecture in vehicles
- Vehicle Communication basics
- Model-In-Loop (MIL) vs Hardware-In-Loop
- Types of HIL Simulators
- PHS vs SCALEXIO Simulators
- dSPACE Hardware (I/O, Communication and processor boards)
- HIL plant modelling using Simulink
- Control Desk and Automation Desk Live Demo
- Basic of Automation using Python
- On-Board-Diagnostics (OBD)
- ETAS-INCA Live Demo

Diagnostics Concepts

- OBD diagnostics
- Diagnostic Trouble Codes (DTC)
- Unified Diagnostic Services (UDS)

Scripting Languages

- Matlab Scripting
- Python Scripting
- CAPL Scripting

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