



**LDRA**



**Five-Day Virtual Workshop**  
**Certification & Standardization Practices for Safe & Secure**  
**Automotive and Healthcare Systems**  
**2 - 6 August 2021**

**Organized By**  
**School of Management**  
**National Institute of Technology Karnataka, Surathkal**  
[www.nitk.ac.in](http://www.nitk.ac.in)  
&  
**LDRA**  
[www.ldra.com](http://www.ldra.com)

**About the Workshop**

Understanding the key technology trends and best practices in Automotive and Healthcare Systems is essential for developing dependable systems which assure safety and security.

This workshop explains practical aspects of building the systems safe & secure by design and addresses associated functional safety and cybersecurity standards. It also addresses the benefits of accomplishing the verification objectives using an automated tool.

To ensure industry readiness for academia across these sectors, the workshop concludes with remarks on enhancing the required skillsets through focused sessions by industry leaders on career planning in today's volatile world.

*Please note : All 5-day attendance is mandatory to get a participation certificate.*

# Schedule for the Virtual Workshop

2-6 August 2021 | 6:00 PM - 8:00 PM (India Time, UTC +5.30)

Day	Theme	Topics Covered
Day 1	Market Dynamics	Welcome Address Key Technology Trends in Automotive & Healthcare <ul style="list-style-type: none"><li>Interdependence of Safety and Security</li><li>SDLC Vs. SSDLC (Secure Software Development Life Cycle)</li></ul>
Day 2	Standards	The role of process standards on safety-critical application development <ul style="list-style-type: none"><li>Automotive [ISO 26262, ISO/SAE FDIS 21434, SAE J3061]</li><li>Medical [IEC 62304, ISO 14971, FDA/AAMI Guidelines]</li></ul>
Day 3	Best Practices for Safety-critical V&V – Part 1	An introduction to Verification and Validation <ul style="list-style-type: none"><li>Requirements Verification and establishment of Vertical traceability</li><li>Design Verification</li><li>Coding Standards for safe and secure coding [CERT, MISRA, CWE]</li><li>Top 10 Secure Coding Best Practices with Examples</li><li>Top 10 Most Dangerous Programming Errors with Examples</li></ul>
Day 4	Best Practices for Safety-critical V&V – Part 2	<ul style="list-style-type: none"><li>Dynamic analysis</li><li>Unit/integration/System tests</li><li>Structural Coverage Measurement</li><li>Measuring the Control couples and Data Couples</li><li>Target Testing</li><li>Requirement Based Testing (RBT) and establishment of horizontal traceability</li></ul>
Day 5	Career Tips	Building a successful engineering career in today's volatile world. <ul style="list-style-type: none"><li>Career planning</li><li>Case Study: LDRA Academic Alliance Program – A game changer!</li></ul> Valedictory Function

## Audience

The workshop is open to students, research scholars, academicians and practitioners interested in software certification and standardization practices. Participation is free and registration will be based on a first come first served basis.

## Important Dates

Last date to Register: 30/July/2021

## Registration Details

The workshop will be free to the audience. Participants must, however, register for the workshop through the registration link - <https://tinyurl.com/NITworkshop>

## Resource Persons

- Amit Kumar, Assistant Vice President - Sales, LDRA
- Anil Kumar, Senior Technical Manager, LDRA
- Deepu Chandran, Senior Technical Manager, LDRA
- Himalya Bansal, Business Development Manager, LDRA
- Shinto Joseph, Director - Southeast Asia Operations, LDRA
- Shreyansh Shukla, Technical Consultant, LDRA

**For more information about the workshop, please write to :**

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