



MAHARAJ SHREE KUMAR SOOD

CONTACT

Gurgaon, India 122001

Mobile: +91-9711391314

bharatvarshsingh@gmail.com

LINKS

- [My LinkedIn Profile](#)

EDUCATION

September 2014

Master of Technology:

Embedded Systems

Amity University, Noida

May 2012

Bachelor of Technology:

Electronics & Communication

MRCE, Faridabad

CERTIFICATIONS

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|  | CERTIFIED IN CYBERSECURITY |
|  | ISO 27001 LEAD AUDITOR |
|  | CERTIFIED 62443 PROFESSIONAL |
|  | CISCO CERTIFIED CYBERSECURITY ESSENTIALS |

PROFESSIONAL SUMMARY

Senior Cybersecurity Professional with **12+ years of experience** across **Automotive Cybersecurity, ICS/OT Security, Embedded Systems, and Connected Platforms.**

Experienced in delivering **security-by-design architectures, cybersecurity risk assessments, and regulatory compliance programs** aligned with **ISO/SAE 21434, UNECE R155/R156, IEC 62443, and NIST frameworks.**

Proven ability to lead **vehicle cybersecurity engineering initiatives, CSMS/SUMS framework implementation, and OT security programs** while collaborating with OEMs, engineering teams, and stakeholders to enhance **product security, regulatory compliance, and operational resilience.**

SKILLS

Cybersecurity Domains

- Automotive Cybersecurity
- ICS / OT Security
- IoT & Embedded Security
- Secure SDLC & Security-by-Design

Automotive Systems

- Connected ECUs (IVI, Cluster, Telematics)
- Body Control Modules (BCM), Secure Gateways
- HPC & Zonal ECUs
- Powertrain Systems (ICE & EV)

Security Standards & Regulations

- ISO/SAE 21434
- UNECE WP.29 (R155, R156)
- IEC 62443, NERC CIP, NCIIPC
- NIST Cybersecurity Framework
- RED, CRA Act

Industrial Systems

- SCADA, DCS, PLC Security
- Industrial Network Security
- OT Risk Assessments
- Component Cyber Compliance
- Critical Infra, Oil and Gas

Security Technologies

- PKI, TLS, Cryptography
- Secure Boot, Debug, Interface, Firmware Update
- IDS/IPS, Firewalls
- Vulnerability Assessment & Penetration Testing

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|  | IBM CERTIFIED CYBERSECURITY ANALYST |
|  | OMNEX CERTIFIED 21434 AUTOMOTIVE CYBER PROFESSIONAL |
|  | CERTIFIED NIST CSF LEAD IMPLEMENTER |
|  | Cert-In Certified Cyber Crisis Management Professional (CCMP) |

ACHIEVEMENTS

- Awarded **Silver Medal** for securing **2nd rank in Master of Technology (Embedded Systems)**.
- **Recognised by the Indian Army for successful delivery and deployment of robotic solutions in real-time operational environments**

WORK HISTORY

April 2022 - Current

Principal Cyber Consultant, Thales, Noida, India

➤ *Risk Analysis, Vulnerability Assessment & Supplier Management*

- *Lead cybersecurity engineering and compliance activities for connected automotive platforms and critical infrastructure environments.*
- *Implement **security-by-design principles across the product lifecycle** for connected ECUs, ensuring alignment with **ISO/SAE 21434 Work Products***
- *Conduct **vehicle-level cybersecurity risk assessments and TARA workshops**, enabling informed security decisions across engineering and program teams.*
- *Support OEM programs in achieving **UNECE WP.29 R155/R156 compliance** by preparing and validating cybersecurity work products.*
- *Establish **CSMS and SUMS frameworks** for automotive OEMs, enabling regulatory readiness and type approval.*
- *Perform **OT/ICS risk assessments and vulnerability analysis** aligned with **IEC 62443 standards (3-2, 4-1,4-2)** to strengthen industrial cybersecurity posture.*
- *Develop cybersecurity policies, procedures, and security architecture guidelines aligned with **IEC 62443 and NIST frameworks**.*

April 2021 - April 2022

Technical Lead, HCL Technologies, Noida, India

➤ *Security Analysis, TARA & Requirements Creation*

- *Led **Threat Analysis and Risk Assessment (TARA)** activities for connected vehicle platforms and infotainment systems.*
- *Performed security assessments of **FOTA architecture and Android-based connected applications** to identify vulnerabilities and security gaps.*
- *Designed and validated **secure boot and secure firmware update mechanisms** to ensure ECU software integrity.*
- *Developed **cybersecurity requirements and mitigation strategies** aligned with **NIST and OWASP frameworks**.*

September 2018 - March 2021

Senior Security Developer, Marelli India Pvt Ltd.,
Manesar, India

➤ **Vehicle Functionality Implementation & SW Architecture**

- Developed **secure embedded software for Body Control Modules (BCM) and instrument cluster ECUs** for global OEM programs.
- Implemented **secure remote keyless entry systems**, ensuring confidentiality and integrity of authentication frames.
- Designed vehicle **anti-theft and immobiliser security mechanisms**, strengthening overall vehicle protection.
- Implemented **secure coding practices aligned with MISRA and CERT-C standards** to reduce software vulnerabilities.
- Created **software architecture models using Enterprise Architect**, enabling scalable and secure ECU design.

February 2015 - September 2018

Embedded Research Engineer, The Hi-tech Robotics Systemz Ltd, Gurgaon, India

➤ **Remote Control Robots with bomb detection, Pick & Place, & long-range surveillance capabilities.**

- Developed embedded software for **robotic surveillance and defence systems** supporting IED detection and remote operations.
- Designed and implemented **CAN-based communication architectures** for multi-module robotic platforms.
- Optimised system design by transitioning from a **multi-MCU architecture to a centralised controller architecture.**
- Integrated hardware interfaces including **SPI, UART, GPS, and CAN Open protocols.**
- Performed motor control tuning, system integration, and load testing to ensure robust field performance.

September 2014 - December 2014

Technical Executive, Milagrow Knowledge & Business Solutions, Gurgaon, India

➤ **Troubleshooting of Home Cleaning Robot Solutions**