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Date of Birth: 29-Nov-1991 | Mob: (+91)-9632079903 | Nationality: Indian | Gender: Male

I am looking for opportunities across Europe/US in Cybersecurity Domain. I am open relocate and remote work.

Professional Summary

Overall 7+ years of experience in cybersecurity across IT and critical information infrastructure industries. Experience includes securing IT infrastructure and driving 'Secure by Design' framework across all stages of concept phase and product development. Technology exposure includes Embedded Devices, web applications, mobile applications, thick clients, IoT devices and APIs including direct experience with most international standards in critical infrastructure security.

Work Experience:

Elektrobit India (May 2020 – Present) - Senior Security Specialist

Establishing cross departmental secure development, technical roadmaps and technology adoption oversight. Providing support to product teams charged with design and development of secure applications, systems and software for automotive controllers and supported infrastructure which includes Web Application, APIs.

Automotive Cybersecurity Process

- Implement and drive the cybersecurity concept at the vehicle/component level in accordance with ISO 21434, SAE J3061
- Executing TARA, define cybersecurity concept, goals and requirements
- Drive Engineering Software OTA security design and analysis
- Develop procedures for OEM and suppliers ([TARA](#), [software security requirements](#), [cybersecurity goals](#), [Developer Interface agreement](#))
- Provide consulting to OEM, Suppliers and internal teams as a technical expert in cybersecurity matters

Penetration Testing and Vulnerability Assessment

- Established dedicated lab environment for fuzz testing on Web Applications, protocols, vehicle modules like Ethernet, WIFI, Bluetooth, USB and other software components.
- Attacks on individual ECU functions such as [OTA software updates](#), feature activation or diagnostics, privilege escalation, hardening OS, Web applications and in-car apps/services
- Analysis of [CAN bus](#), [onboard diagnostics](#).
- Attacks on interfaces ([USB](#), [Ethernet](#), [WLAN](#)), multimedia functions (e.g. attacks via manipulated MP3 files), other connections such as Bluetooth

Visteon Corporation (Sept 2017 – Dec 2019) - Embedded Security Engineer

Roles and Responsibilities

- Performed Penetration testing and Vulnerability Assessment on Automotive devices
- Responsible for executing TARA, defining cybersecurity goals and reviewing supplier/OEM requirements
- Responsible for designing Cybersecurity plan and test cases for performing security testing
- Triage risk of identified vulnerabilities and findings
- Automate static code analysis, port scanning, fuzz testing, TARA using python scripting
- Perform Secure Code analysis of Web Application, thick Clients and Embedded Software

Aujas Networks (April 2015 – May 2017) – Security Consultant

- Perform Secure Code review for applications (Thick Client, Web and Android applications)
- Vulnerability Assessment and Penetration testing of applications by manual and automated approach.
- Attacks like Buffer Overflow, Heap Overflow, Use After memory, SQL injection, XSS, Deserialization on web applications, binaries, host.

HandsFree Networks (March 2014 – Jan 2015) – Product Engineer

- Vulnerability Assessments for web applications
- Perform Secure Code Review for web application
- Training developers on Secure Code guidelines and methodologies.

Professional Expertise

| | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Programming Languages | Python, JAVA, PHP, C (beginner) |
| Tools | IBM AppScan Source for Analysis, Burp Suite, CheckMarx, FlawFinder, Kali Linux, Nexpose, Coverity, Synopsys Defensics, HP-WebInspect, Wireshark, Binwalk, Radar2, wFuzz, nmap, Ubertooth, Wifi-Pineapple, sqlmap, dirbuster, Ghidra, nikto and more... |
| Frameworks / Standards | Vehicle Security Standards ISO 21434, SAE J3061 OWASP TOP 10, SANS TOP 25, WASC 2.0, CVE/CWE, CERT |
| Subject of Interest | Secure by Design , Cryptography, Penetration Testing Threat Analysis and Risk Assessment (TARA), Application Security |
| Professional Certifications | Offensive Security Certified Professional (OSCP) |

Education

Bachelor of Engineering in **Information Technology** (LNCT-S Bhopal) 2009 – 2013

Post Graduate Diploma in **Cyber Security** (C-DAC Bangalore) 2013 – 2014

Languages

| | UNDERSTANDING | | SPEAKING | | WRITING |
|-----------------|---------------|---------|-------------------|--------------------|---------|
| | Listening | Reading | Spoken Production | Spoken interaction | |
| ENGLISH | C2 | C2 | C1 | C1 | C1 |
| DEUTSCHE | A1 | A1 | A1 | A1 | A1 |

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

Projects

CVE-Newsletter

CVE Newsletter is developed in Python which will search for newly updated CVE's for a list of selected components/packages and send out a security newsletter to development and security teams.

Threat Assessment and Risk Analysis Tool

Developed an application in python which will prepare Threat Analysis and Risk Assessment based assets present in an Embedded Device or Software. TARA generated will be based on very generic threats defined for an asset in a master database.

EmailSecure

This project was developed as part of assignment in Post Graduate diploma at C-DAC Bangalore. We developed an email service using JAVA. Objective was to develop a secure email web application.

InstantEval

Automated evaluation of programming tasks and assignments. Inspired by CodeChef and ProjectEuler. For use in educational as well as competitive environments.