

Importance of Automotive and IoT Testing



Roger Neal
Head of Product



Aviram Jenik
CEO/Co-Founder/Investor



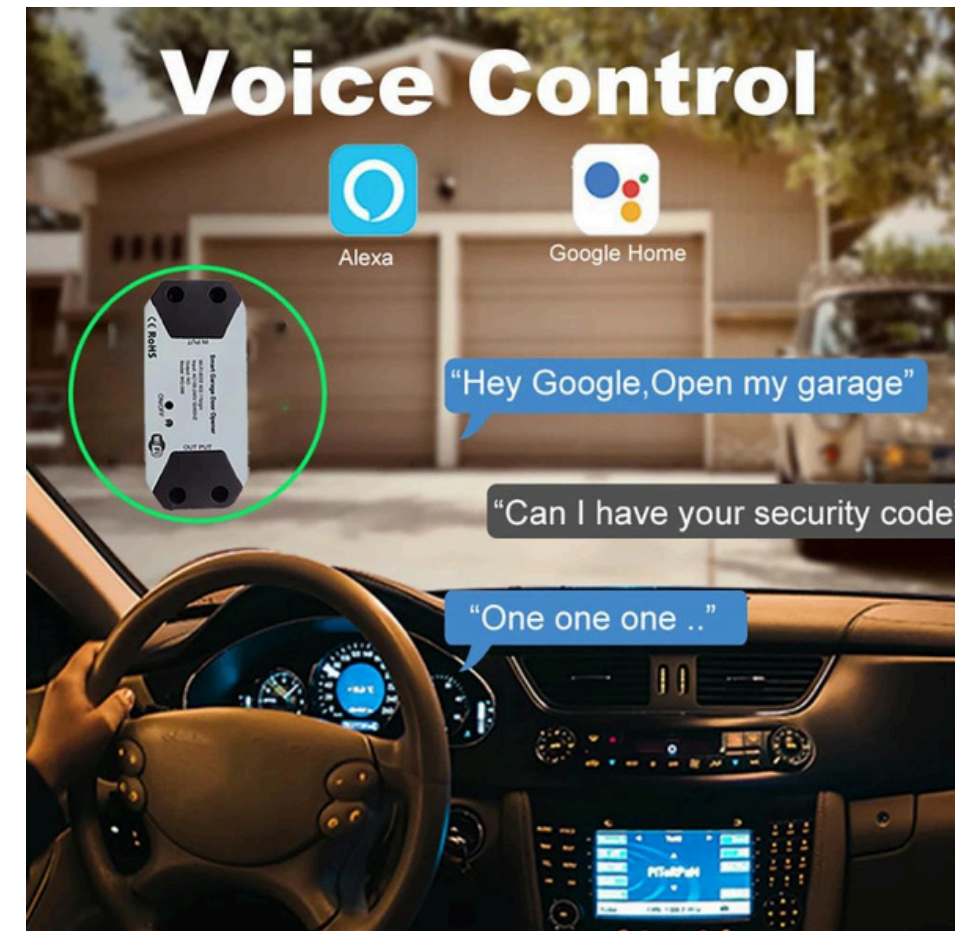


The Growing Importance of Security in an Interconnected World

Integration across technologies leads to wider attack surface.

As our connectivity increases, so do the vulnerabilities, opening new doors for cyber threats that can compromise personal safety and data security.

Proactive security measures, like secure code review and dynamic security scanning, are essential to reduce the attack surface and increase customer trust.



Risk Where You Least Expect It!



Preventing Disaster Requires the Right Practices in Place



DST: Anticipate Attacks with Real-Time Simulation with Fuzzing or Pentesting

Secure Code Review: Proactively Identify and Resolve Risks in Application and Third-Party Component

Secure by Design: Strengthen Defense Mechanisms Before Attacks Occur



Why Focus on DST?



Verifies the Existence of Vulnerabilities in Real-Time

Prevents Costly Recalls by Identifying Issues Before Release by fuzzing and pen testing

Protect your Brand Reputation Through Security Testing



Live Example of DST Detecting Vulnerabilities



Use Case:

A leader in electric vehicle manufacturing wanted to explore their CAN bus systems resilience against unique and unexpected attacks in order to adhere with ISO compliance and prove product quality before release.

Objective:

To ensure the CAN bus system is secured against cyber threats before production. They decided to perform Fuzz testing on their system.



Why Focus on Secure Code Review?

Mitigates Risks in Third-Party Software and Components before its implemented in your design.

Reduces Remediation Costs by Up to 80% When Addressed Early!

Ensures Compliance with Industry Regulations and Standards such as ISO/SAE 21434

VS

The original car function is no fun to drive

You can enjoy various video music APP

VS

Mobile phone navigation is not safe, and it is inconvenient to answer calls

Say goodbye to data lines, wireless automatic connection



Live Example of SCA Detecting Vulnerabilities

Use Case:

An automotive manufacturing company is seeking to integrate advanced infotainment systems into their new line of mid-range passenger vehicles. With the aim of enhancing user experience while controlling costs. They decide against developing an infotainment system from scratch due to the high costs and extended development time associated with such an endeavor.

Decision:

They chooses to implement the pilot-drive system—an open source vehicle headunit developed in Python. This system is selected due to its robust set of features, active community support, and flexibility for customization.

OSS Repository Used: <https://github.com/lamemakes/pilot-drive>

Insight From an Expert: Aviram Jenik



Thank You

When I've completed my
security awareness training



STAY IN TOUCH WITH US!

We Hope You Enjoyed!



+916-790-1050



rogerne@apona.ai



<https://apona.ai> or <https://we-bridge.com>



2267 Lava Ridge Ct, Ste 200, Roseville,
CA