39

Solar Turbines
A Caterpillar Company

Noise Buster

Matúš Sabol, Adam Juroš, Ihor Rybitskyi, Martin Mitro, Bohdan Stadnyk
Mentor z Solar Turbines Slovakia: Matej Podstavek
Mentor z TUKE: doc. Ing. Eva Chovancová PhD.

Problem Description

Traditional SCA tools (JFrog Xray) produce **hundreds** to **thousands** of vulnerability findings.

- A large portion of finding are **irelevant** to real application use based on context

Goal: Reduce SCA Noise & Save Engineering Time
While preserving real security threats

Key Features

- ❑ Two-level AI filtering (context + security)
- ❑ 🎯 Context-aware relevance scoring (0-10)
- ❑ Deterministic rule-based filtering
- ❑ Clear prioritization: must-fix vs. low-impact
- ❑ Fast & scalable backend (FastAPI)

Project Status & Usage

1. **Upload**: SCA (Xray) export & app source code.
2. **Process**: Run AI & rule-based analysis.
3. **Review**: Get prioritized findings & summaries.

Functional prototype validated on JFrog Xray for developers, security engineers, and tech management.

Main Idea

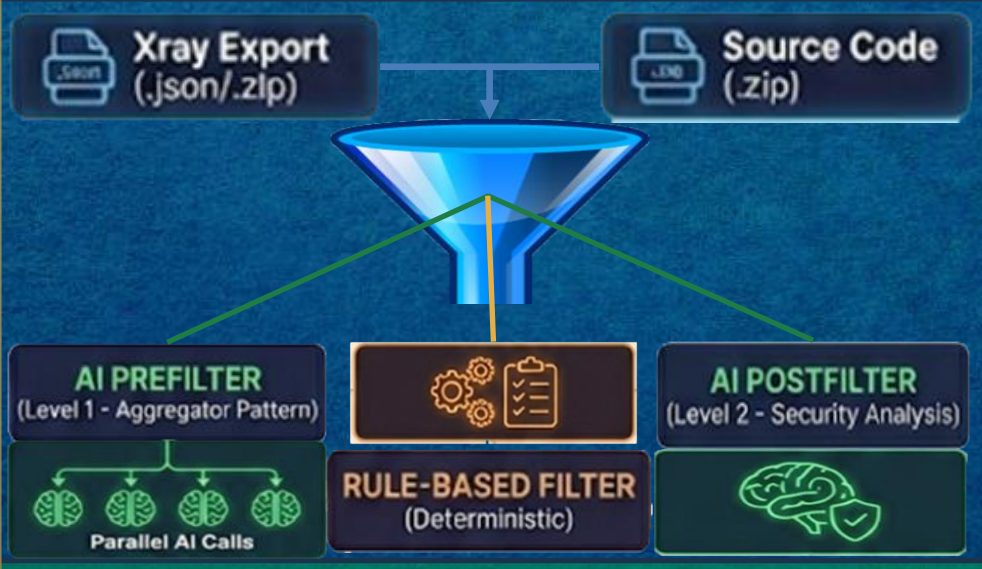
Noise Buster combines traditional SCA output with **source code context** and **multi-level AI** analysis to determine which vulnerabilities truly matter for a specific application.

Instead of asking „**Is this vulnerability known**?“

Noise Buster asks:

- **„Is this vulnerability relevant in this application?“**

Architecture



User Interface

LIVE IT PROJECTS

investechskills Košice 2026