



APRIL 18-19, 2024
MARINA BAY SANDS / SINGAPORE

AutoFix: Automated Vulnerability Remediation Using Static Analysis and LLMs

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2007



2014



2019

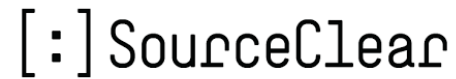


2023

2003



2010



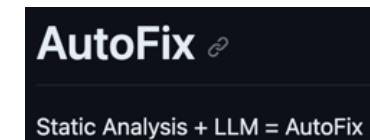
2018



2022



HIP/SLEEK : Automatic Verification and Specification Inference System



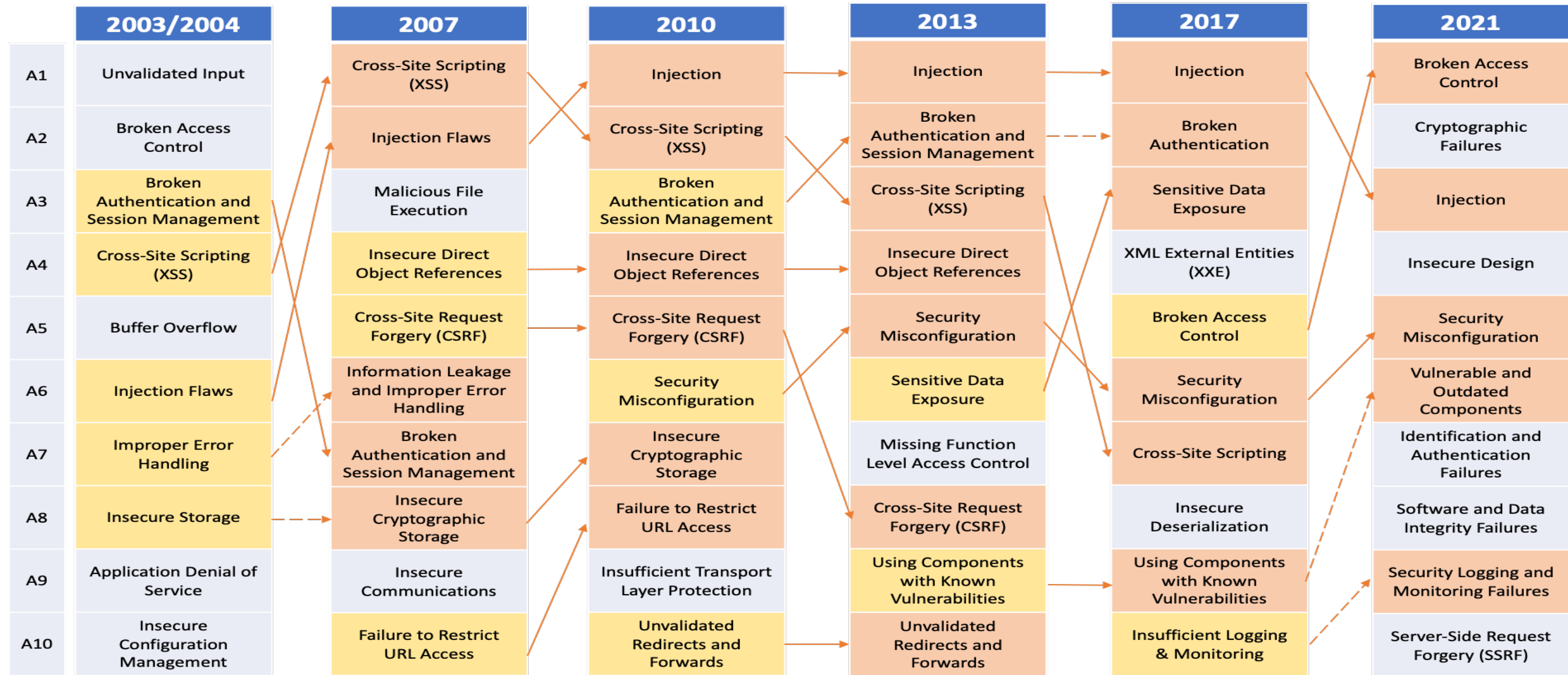


*building security tools
for developers*

v/s

*developer tools for
security*

OWASP Top Ten



Breaking the Cycle: Beyond Scan-and-Fix in AppSec



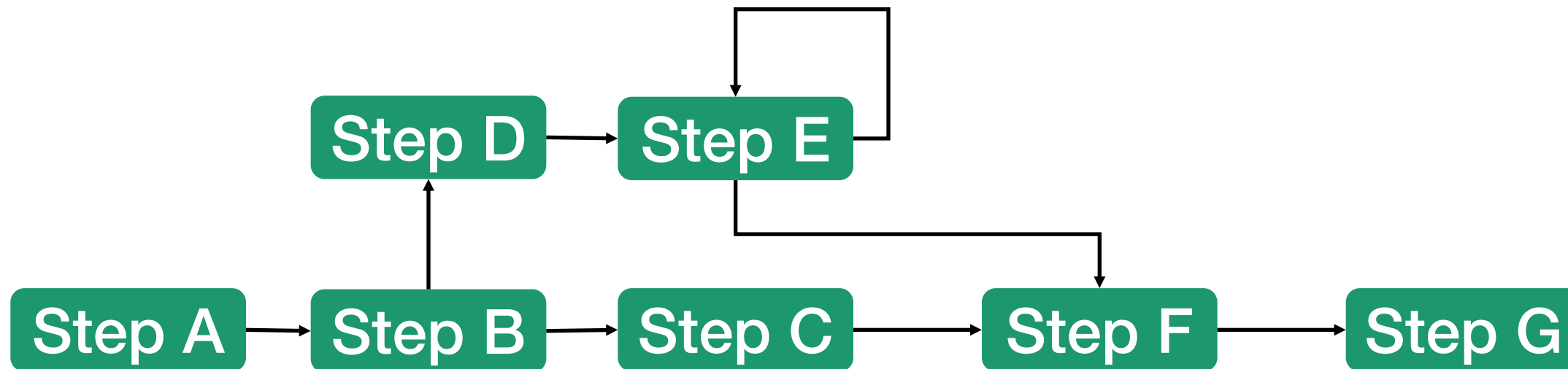
- Old Ways, New Challenges: Stuck in a "scan and fix" loop, traditional SAST/DAST tools leave us chasing vulnerabilities, not proactive security.
- Shift Left Illusion: Moving security earlier in the SDLC doesn't stop the cycle; it starts it sooner, overburdening developers with endless issues to fix.
- IDE Interruptions: Real-time scanning in IDEs promises security but disrupts developer workflow, compromising productivity with constant alerts and system overhead.

This pattern is just wrong. It's broken. We've seen a history of the challenges following this pattern does in working with developers.” —[Chris Romeo](#)

Patchflow



patched-codes / patchwork



 Patchwork

<https://github.com/patched-codes/patchwork>

AutoFix

5,000+ Vuls Patched



 Patchwork

```
patchwork AutoFix -sarif=results.sarif -createBranch=patch-main -severity=critical -patch=customprompts.json
```

Extensible with steps

Add, modify, or remove steps easily to extend the patchflow to suit your needs.

Integrate with development tools

Run anywhere in your development lifecycle - CLI, CI, IDE etc.

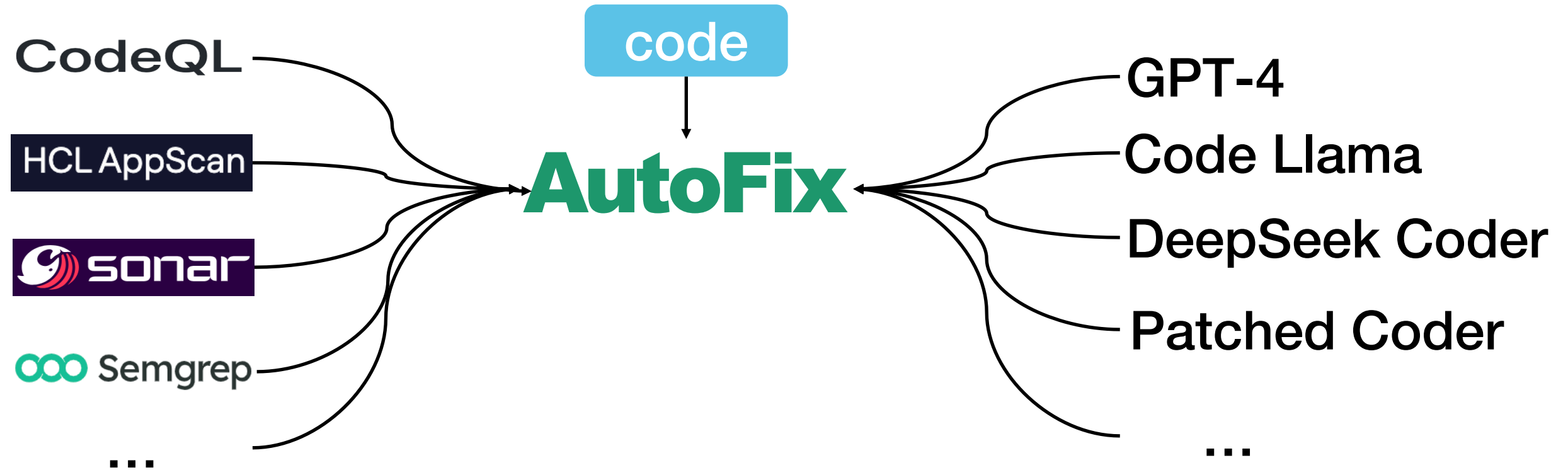
Customize with patchprompts

Use customizable natural language prompts to tailor patches to specific vulnerabilities or coding standards while ensuring alignment with the project's requirements and coding practices.

Self-host with your own LLM

Can be freely hosted end-to-end - including the LLM - on your own hardware or private cloud

SAST + LLMs



DEMO



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Thanks!

<https://github.com/patched-codes/patchwork>

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