

Khoi Nguyen Phan

AI Engineer & Full Stack developer

System designer · Available

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SKILLS

Rust, JavaScript, Java

ABOUT

From scaling distributed databases to perfecting mobile interfaces, my 13-year tenure is rooted in first-principles engineering. Over the last few years, AI has completely changed how I build: I no longer write manual code—I architect the systemic intent and the automated testing harnesses to validate it.

Let's be clear: building production-grade applications with AI is not easy. Without a deep architectural foundation and rigorous checking, relying on AI guesswork results in fragile systems riddled with technical debt.

I am not a "vibe coder." I am a System Designer who uses AI as a high-velocity execution engine, wrapped in strict verification guardrails. Because I understand complex systems under the hood, I instruct AI with absolute precision and audit its output ruthlessly. I provide the mature technical vision and safety harness; AI provides the speed.

PROJECTS

kprotect, Linux eBPF filter file access with chain-of-trust concept

github.com/khoinp1012/kprotect

Rust · TypeScript

kprotect is a kernel-level security engine designed to protect your sensitive data from supply-chain attacks (like malicious Python or Node.js libraries). It stands as an independent security layer for the most sensitive files.

eBPF-LSM Enforcement: Intercepts file access at the kernel level based on path patterns and wildcards (e.g., *.env, home/user/.ssh/*).

Lineage Verification: Validates the process chain rather than just a single binary.

- VS Code ' Terminal ' cat (Authorized chain)
- VS Code ' Terminal ' python script.py ' cat (Unauthorized chain blocked)

Comprehensive Interface: Includes a system daemon, a CLI tool, and a desktop GUI.