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CS603
Internship Work

pamir[®].ai

San Francisco, CA



Building Pocket sized
AI hardware.

YOUR AGENT'S



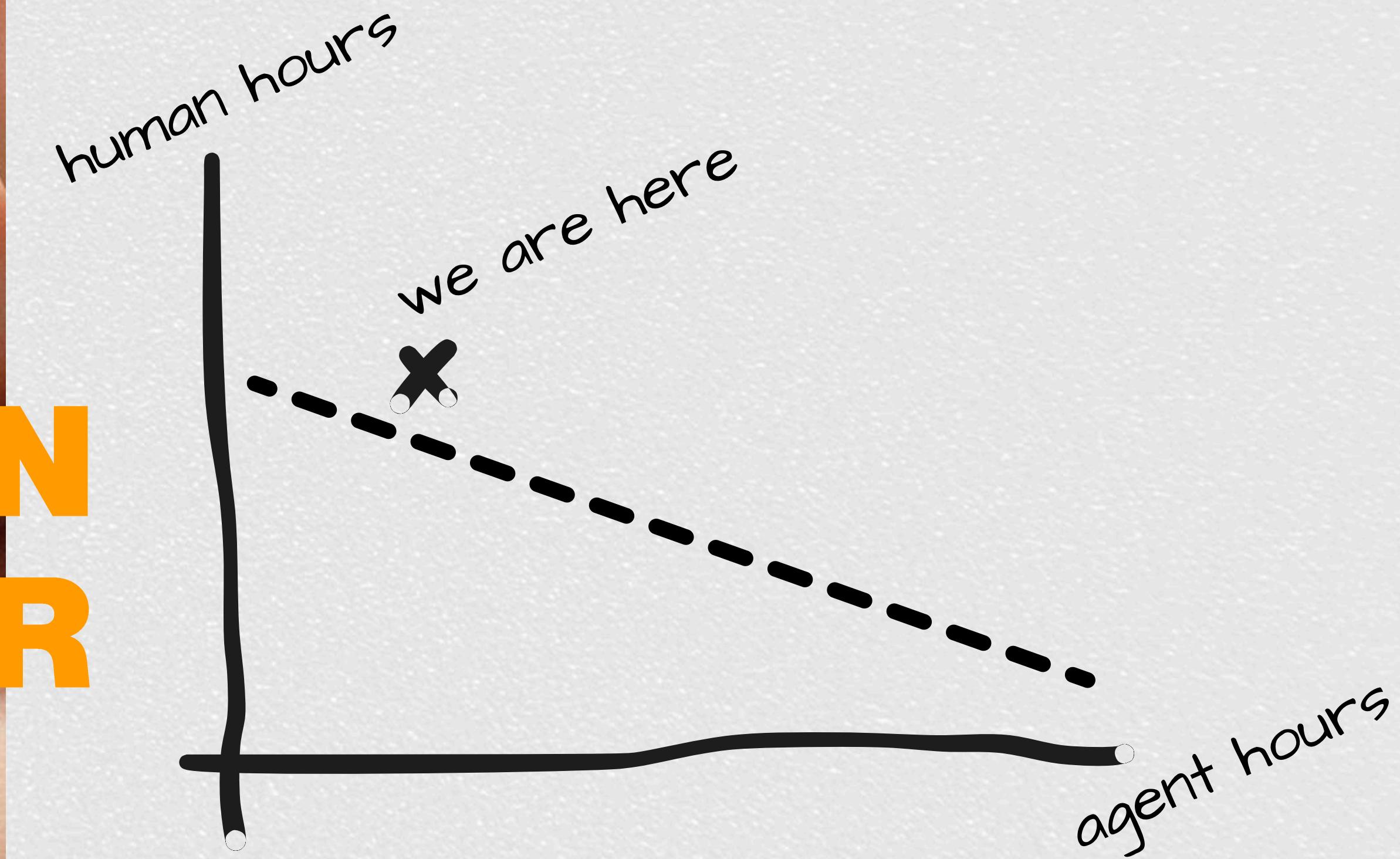
Let your AI code, test
and deploy 24/7 on its own Linux box.

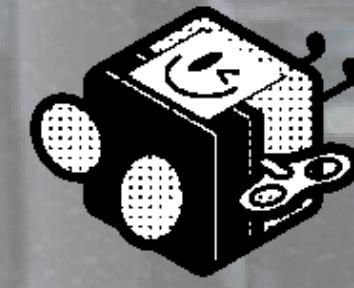
OWN
COMPUTER

Where Agents are heading:

Agents will be *smarter*
Run *Longer*
Use *more tools*

Your job is to feed it data and keep it running.





pamir.ai

3 ppl team
2 founders and 1 FT

Agent layer

LinuxOS

Design

Manufacturing

GTM

2 to 5 devices every day

14 devices per day

Software . DevOps

Developers who need 24/7 AI coding assistance and remote development capabilities.

Firmware . Embedded

Hardware engineers who need to flash, test, and iterate on embedded systems.

Indie . hackers On-the-go

Builders who are not experts in software or hardware, but want to build with hardware.

🔍 https://device.pamir.ai/usr/kevin

vibe-code-distiller Dashboard > Commitchecking

Connected CPU: 1% Temp: 45.2°C RAM: 41% Notifications: Disabled

Projects New Project Filter projects... Esp32 9/3/2025, 3:43:30 PM Commitchecking 9/3/2025, 2:05:13 PM Ui-changes 9/1/2025, 6:31:38 PM vibe-code-distiller-ui 9/1/2025, 6:18:26 PM test 8/27/2025, 1:07:15 AM

File Explorer Root > home > distiller > projects > Commitchecking .claude .claude-code-chat check_all_branches.sh CLAUDE.md

Commitchecking-1 x Esp32-1 x Esp32-2 x

Git Status (Commitchecking - Not a git project)

Current Changes Key Term

Let me check stable branches and extend the time window: [405/653]

- Bash(echo "==== distiller-cm5-services stable-1.0-staging branch (last 7 days) ===" && gh api "/repos/Pamir-AI/distiller-cm5-services/commits?sha=stable-1.0-staging&s...")
- Bash(echo "==== distiller-cm5-sdk stable-1.0-staging branch (last 7 days) ===" && gh api "/repos/Pamir-AI/distiller-cm5-sdk/commits?sha=stable-1.0-staging&s...nce=2025-...")

Update Todos

Complete Pamir-AI Commits Report (Including All Branches)

Last 3 Days – Default Branches Only

- distiller-vscode-extension: 3 commits
- dinggy: 1 commit
- pamir-ai-soundcard-dkms: 3 commits
- pamir-apt-server: 1 commit
- distiller-cm5-sdk (main/staging): No commits
- distiller-cm5-services (main/staging): No commits

Active Development Branches (Last 7 Days)

- distiller-cm5-services (stable-1.0-staging): 16 commits
 - Network & connectivity improvements
 - FRP tunnel service implementation
 - Frontend linting infrastructure
 - Display orientation fixes
 - MAC-based hostname sync
- distiller-cm5-sdk (stable-1.0-staging): 15 commits
 - Rust-based e-ink image processing refactor
 - Multi-format image support with auto-scaling
 - Debian packaging fixes

Device 4:42 naruto.devices.pamir.ai

Distiller > Ui-changes device

- >Password recovery doesn't require external services

Sound good?

Cool propose this and raise issue on GitHub

Claude's Thinking Process I'll create a GitHub issue proposing this password gate feature with the combined security strategy.

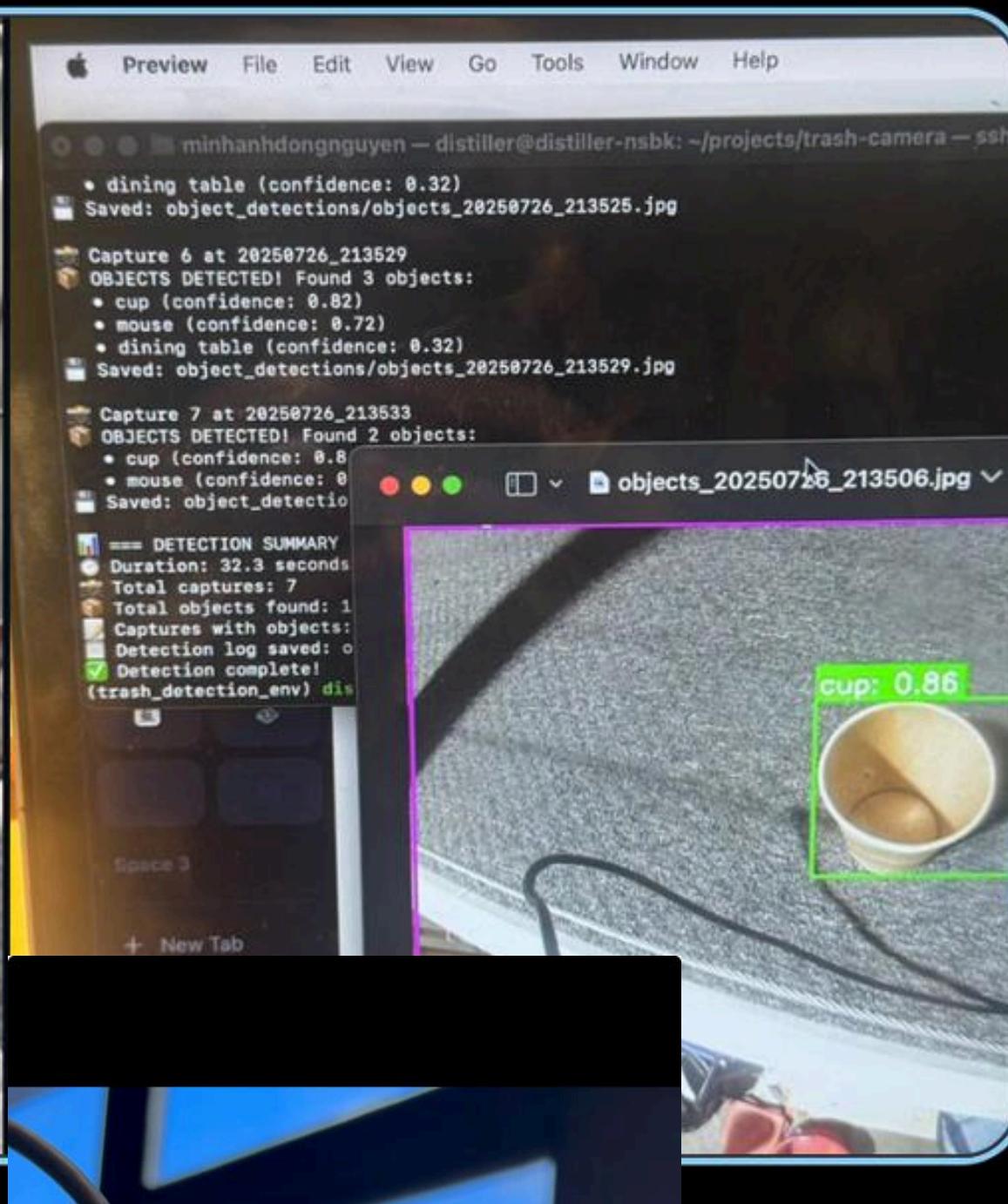
Bash Perfect! I've created GitHub issue #75 proposing the password gate feature with the combined security strategy.

Claude's Thinking Process Plan Mode Thinking

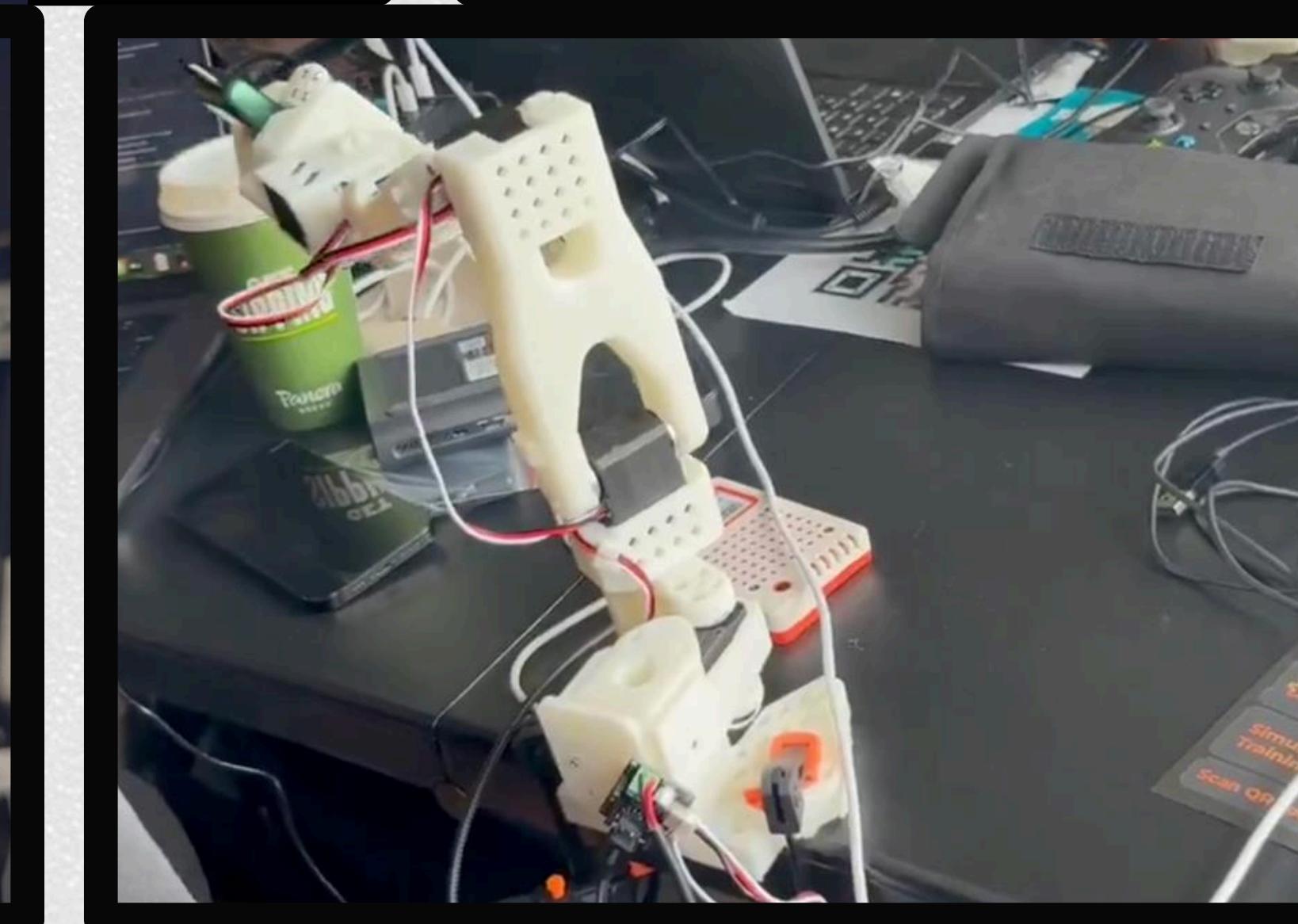
/ @ Message Claude... 93

Message Claude... 93

@pamir_ai made it so easy for me to run yolo on this arducam by hooking it up to claude



Offensive cyber security
hack everything !



BEST MINI LINUX OS FOR AGENT TO RUN ON



THE NEXT COMPUTER



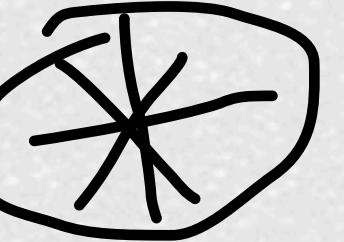
INTERNSHIP

DESCRIPTION

May 2025 and ongoing

- 1. Linux BSP and Firmware development
- 2. Linux kernel development
- 3. Software engineering
- 4. DevOps

Remote internship with daily to weekly interactions, directly mentored by CEO and CTO (ex, Microsoft and Qualcomm).



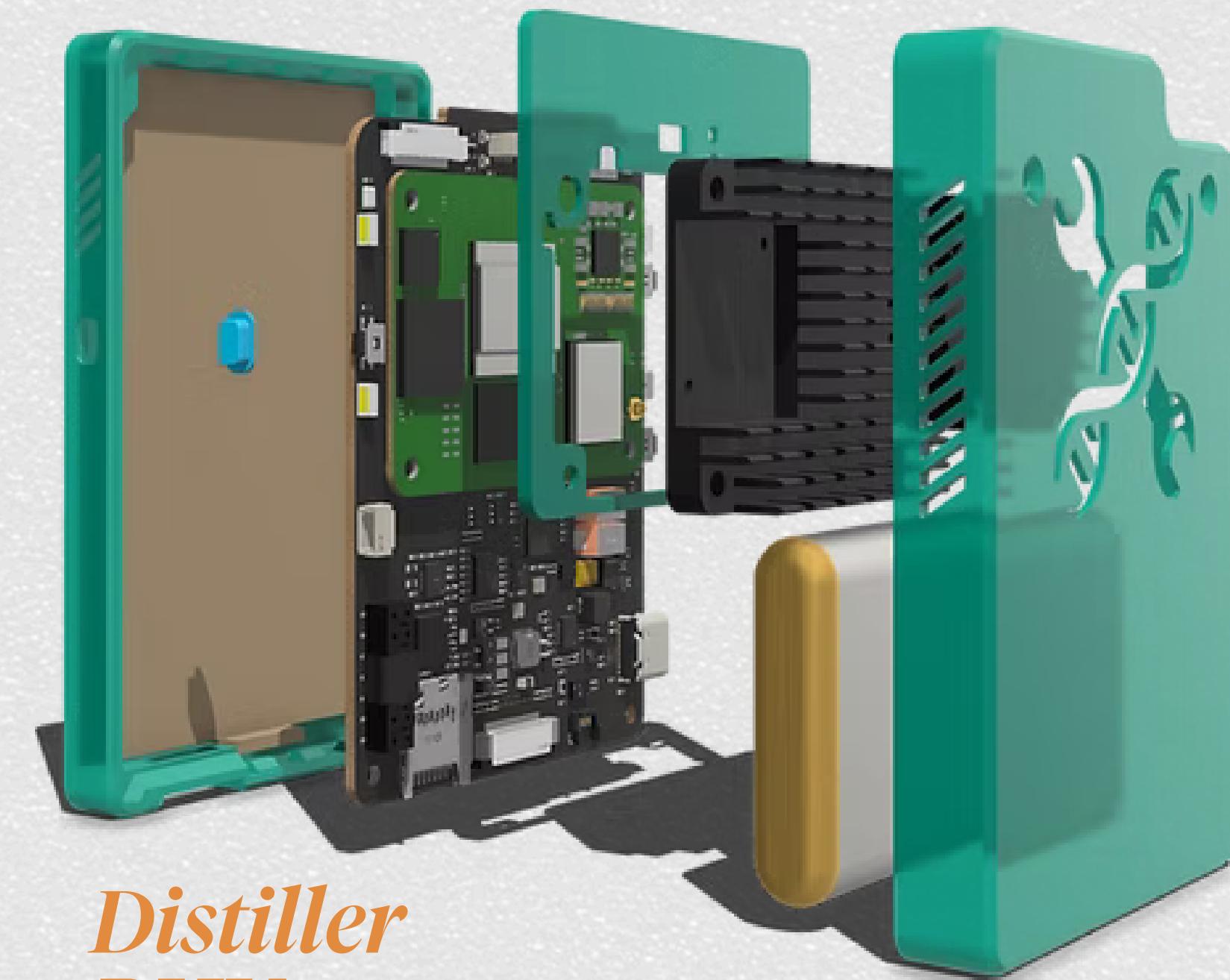
PRODUCTS



*Distiller
Alpha*



*Distiller
Air*



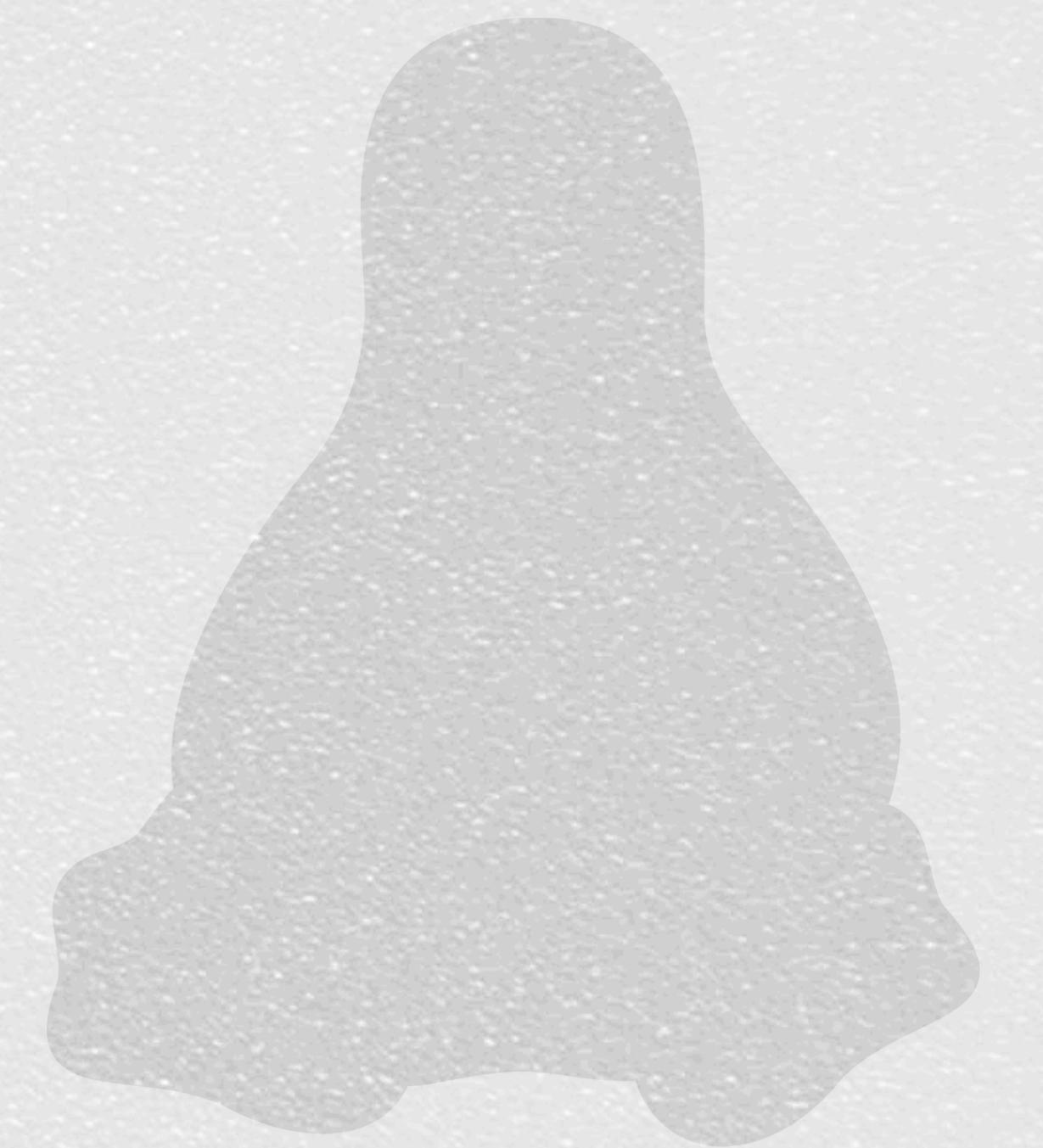
*Distiller
BHV*

PROJECTS.

1. Distiller SDK
2. Distiller Services
3. Distiller BHV Application
4. Distiller Updater
5. PamirAI kernel modules (SAM, Eink, Soundcard)
6. PamirAI Apt server CLI
7. PamirAI Apt Web Portal
8. Debian image build systems (pi-gen and Armbian)
and many more...



TECH STACK USED

- 
1. Multiple **Linux kernel drivers** written in pure C99 syntax, dkms based installation.
 2. Multiple **Python CLI** projects using **Typer** and **Rich** libraries
 3. Multiple **client server python applications** written using modern **fastapi**, **unicorn**, **jinja2** and **asyncio** libraries, pytest integration for integration and unit tests.
 4. A whole lot of **bash scripting** with **shellcheck** and **shfmt** compliance with modern bash 5 syntax and semantics.
 5. Modern **React** and **nodejs** based Web portal for Apt server using **Mantine ui**, **TypeScript** and **ESLint Next** compliance.
 6. Build framework using **Just**, **Make** and **Yaml** based **Github workflows**.

LEARNINGS



1. Modern python libraries and tools ([uv](#), [ruff](#), [mypy](#), [pytest](#), [asyncio](#), [jinja2](#), [unicorn](#), [fastapi](#), etc).
2. Debian packaging using modern tools ([debuild](#), [lintian](#), [debhelper](#), [git-buildpackage](#), etc).
3. Overview of Latest Linux kernel driver and subsystem API, out-of-tree-module creation and installation using Dynamic Kernel Module System (DKMS), Device tree overlays (DTBOs), etc.
4. Generate schematics using [KiCAD](#) PCB files.
5. Deep dived in [UART](#) specifications and internals.
6. [Micropython](#) and [rp2040](#) platform.
7. [pi-gen](#) to build Raspberry pi debian images and [Armbian](#) to build Rockchip debian images.
8. [pyQT](#) and [QML](#) to generate QT based GUI applications.
9. How to collaborate remotely using Notion, GitHub issues, GitHub projects and Slack bots.
10. Comprehensive use of AI tools to create code and context for different projects, create SKILLS, AGENTS to improve the code quality and correctness of the AI tools.

CHALLENGES

1. Remote collaboration on active projects.
2. Deadline and task completion estimations.
3. Hardware bringup.
4. Getting the hardware shipped.
5. Lack of Code conventions.

CONCLUSION

- Learned Async communication, self-learning and broken Circadian rhythm.
- Learned agentic software development practices to build quick and deploy.
- Learned Product thinking, business strategy, and what it takes to build a successful technology company.

Formed a strong foundation for the future software development practices.
AGI is real and we need to align with this new Agentic development.

ANY
QUESTIONS?