

ProventusNova Case Studies



We know what is like to have all the HW ready to start testing your AI model on your embedded device but have it be a pile of problems one after the other. Ending up with a frustrated team of engineers who feel like they are wasting their expertise on tasks that should not even be part of their scope.

- Custom carrier boards that won't boot.
- Unreliable camera systems.
- Broken camera drivers.
- Poorly optimized media pipelines.
- Underperforming Edge AI models.

We'll build your entire embedded software architecture in 15 weeks.

Our Money Back Guarantee

If you are not 100% satisfied with our work after the first milestone is delivered, we will provide you with a full refund.

Contact Details

📍 1603 Capitol Ave, Cheyenne, WY

✉ admin@proventusnova.com

🌐 www.proventusnova.com

PROJECTS

Smart elderly care device.



Platform MediaTek G510
Timeline 12 Months
Scope Port flagship device from NVIDIA Jetson Nano to MediaTek G510.

Outcomes

- Client launched in just 12 months.
- Client dominated US market.
- Client cut per unit cost by \$200.

Responsibilities

- Develop custom Yocto meta-layer.
- Port app code to new platform.
- Deploy AI models on MDLA.
- Port GStreamer pipes to G510.
- Optimize media pipes for G510.
- Add WebRTC video conferencing.

Remotely operated race car.



Platform NVIDIA Jetson Orin NX
Timeline 8 Weeks
Scope Build MVP Yocto Distro, fix camera and AV1 streaming issues.

Outcomes

- Client team unblocked after 2 weeks.
- Client launched on time.
- Client got funding for new features.

Responsibilities

- Develop custom Yocto meta-layer.
- Upgraded kernel version to 6.12.
- Add CTI Bosen carrier board support.
- Add dual Framos camera support.
- Fix camera blur issues.
- Fix AV1 streaming issues.

Autonomous driving platform.



Platform NVIDIA Jetson Orin AGX
Timeline 30 Hours
Scope Fixed USB support on custom carrier board for NVIDIA Jetson AGX Xavier.

Outcomes

- Client met final customer deadline.
- Client secured new contract for NVIDIA Jetson Thor.

Responsibilities

- Fix USB support for custom carrier board on Jetpack 6.2.
- Port USB fix from Jetpack 6.2 to Jetpack 5.1.

TESTIMONIALS

"We had been blocked for several weeks. ProventusNova stepped in and resolved the issue in under a week."

— Bongjin Raum Jeong,
CEO & Hardware Engineer
UncommonLab



"Their deep platform knowledge and hands-on approach saved us days of trial and error."

— Milan Young
CTO & Founder
Farmhand AI



"Their collaborative approach, including jumping on video calls whenever needed, was invaluable."

— Aiswarya Rani
BioTech Researcher
CSIR-IGIN

