



DEVIN HONSON

SOFTWARE ENGINEER . REAL-TIME MEDIA . PLATFORM & SYSTEMS

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PROFESSIONAL SUMMARY

I build production systems from scratch: native media engines, real-time pipelines, full-stack platforms, and ML audio. At Real Labs I own the whole stack. GPU compositing and Rust encoder work, Django backends with auth and billing, automated deployments, six services running in production. The numbers: latency cut from 72ms to 4.82ms, A/V sync drift held under 1ms, 89 passing tests, systems that stay up.

CORE STRENGTHS

Real-Time Systems Engineering	GPU / Encoder Pipeline Optimization	Native Windows Media Runtimes
ML Audio Inference & Processing	Production Operations & Deployment Automation	Full-Stack / Platform Architecture

TECHNICAL SKILLS

LANGUAGES Python . Rust . C# . JavaScript / TypeScript . HTML & CSS . SQL	BACKEND & DATA Django . REST APIs . WebSockets . Celery . Redis . PostgreSQL . Auth . Billing & Webhooks
SYSTEMS & MEDIA FFmpeg . Direct3D 11 . WASAPI . GPU Compositing . A/V Sync . Capture/Encoding . ML Inference	TOOLS & PLATFORMS GitHub . Nginx . systemd . Gunicorn . Daphne . Ubuntu/Linux . Windows Native APIs . TLS/DNS

ENGINEERING EXPERIENCE

Founder & Lead Software Engineer

2019 - Present

Real Labs Development LLC

IMPACT: Shipped 4 proprietary engines and 3 production modules. 12 active **RealVideoCreator** projects running on this infrastructure today.

- Designed and shipped production systems across five products: **RealVideoCreator**, **LUNA Engine**, **Real Gamers**, **VoiceLab**, and internal platform tooling. Backend services, native media, GPU graphics, ML audio, and ops all in scope.
- Cut a media encoding path from 72ms to 4.82ms (93% faster) by instrumenting the pipeline, profiling hot paths, and restructuring the encoding flow.
- Tightened A/V sync drift to under 1ms across all **LUNA Engine** capture paths by rebuilding the clock and timing model from scratch.
- Run six independent production services with isolated deployments, structured logging, and health checks. 89 Rust/audio tests cover the core media stack.
- Built the **Real Labs Portfolio Studio**: visual CMS with Draft/Publish workflow, version history, media uploads, page builder, and atomic static snapshot deployment.

- Write front-end interfaces and internal tools in HTML, CSS, JavaScript, and C# for creator workflows, admin dashboards, and platform integrations.
- Work directly with creators, testers, and early users. Diagnose issues, trace bugs to root cause, and ship fixes fast.

SELECTED ENGINEERING PROJECTS

REALVIDEOCREATOR Django . Python . PostgreSQL . FFmpeg Full-stack video creation and editing platform. Subscriptions, creator workflows, export queues, and production services. Built from data model to deployment.	LUNA ENGINE Rust . D3D11 . WASAPI . Real-Time Native real-time media runtime. GPU compositing, capture, overlays, encoding, A/V sync under 1ms, resource lifecycle, and runtime health monitoring.
REAL GAMERS Rust . Direct3D 11 . WASAPI . Streaming Native Windows media and streaming foundation. Capture, rendering, audio, sync, and streaming architecture for live production.	VOICELAB ML Inference . CPU/GPU . Audio Processing Voice cloning and generation. In-house inference with CPU/GPU execution paths, audio processing pipelines, and full production integration.

EDUCATION

Michigan Technological University	Computer Science & Robotics	2011 - 2015
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One system. Every stage of the work.
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Tim Hansen

