AI Engineer — Agentic Systems

Nazar Lenyk

Agent orchestration · voice · applied ML · evals

CONTACT

onelenyk@gmail.com telegram.me/onelenyk linkedin.com/in/onelenyk github.com/onelenyk/

> In software since January 2019 · Mobile Tech Lead, Android & KMP · all AI work below is personal, built on my own time · available immediately

AGENT ORCHESTRATION

Sisyphus — self-hosted orchestrator for coding agents

personal · 2026 · Python 3.14 · 25.7k LOC · 1,878 tests

- goal → plan → workers (git worktrees) → reviewer → merge
- merge gate: repo's own check command, exit code bound to commit SHA
- orchestrator: (thread + event) → one action; no model HTTP in core
- 25 MCP tools, scoped per (task, role), bearer token per run
- sandbox: Seatbelt write/read deny, egress allowlist, credential vault
- 30-day self-build: **46/120** trunk commits · **26/29** tasks without a human turn · **1/111** failed

VOICE & SPEECH-TO-SPEECH

heare — realtime ambient voice assistant

personal · 2026 · Python · 12 packages · 21k LOC

- PCM spine: VAD → STT → turn → LLM → TTS; no Pipecat
- AEC: WebRTC AEC3, far-end reference, 10 ms blocks, **40–50 dB**
- turn end: one monotonic deadline; two timers before → double answers
- TTS: edge-tts MP3 → ffmpeg PCM, streaming, first chunk before synthesis ends
- STT: Whisper large-v3 via Groq, uk/en/ru, hallucination filter
- barge-in while TTS plays

APPLIED AI

reel-pipeline — phone footage → finished short video

personal · 2026 · Python + Node

- faster-whisper word-level timings · DeepFilterNet denoise
- 1 LLM call per take → JSON schema; sha1 cache → deterministic output
- floor plan: CubiCasa5K walls → own room segmentation
- evals: 15 takes · **40-take blind set** · 4× determinism · **58 unit + 22 browser** tests

tg-sync — 24/7 monitor of the information space

personal · 2026 · Python · Postgres 16 + pgvector

- local multilingual embeddings (MiniLM-L12-v2, ONNX, 384d, L2) — no API calls for similarity
- clusters posts with their copies, rewrites and translations by cosine distance
- threshold calibrated on real data: **5,141 posts / 36 h · ~940k pairs** · uk↔ru measured separately

PRODUCTION

- **VanOnGo** — Mobile Tech Lead, Oct 2025 – Nov 2026 · completed the KMP/CMP migration: 100% UI + logic shared, tested and QA-verified · mentor 2 · before that Android Engineer, Apr 2023 – Oct 2025
- **ALP.COM · Axles · Trexoz · Infotechcentre** — Android · 2019 – 2023

ORCHESTRATION

multi-agent design · tool scoping · MCP servers and clients · sandboxing · permission gates · budgets

VOICE / S2S

VAD · AEC · turn detection · barge-in · streaming STT/TTS · Whisper · edge-tts · PCM, ffmpeg

APPLIED ML & EVALS

faster-whisper · DeepFilterNet · segmentation · structured output · eval sets · determinism

CODE

Python · Kotlin · Bash · TypeScript · C++ (ESP32) · FastAPI · SQLite · Docker · GitHub Actions

EDUCATION

WUNU — Bachelor's degree in Computer Integrated Technologies, 2016–2020

LANGUAGES

Ukrainian native · English B1+ (intermediate+)

updated: November 2026