Jonghyun Beik

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Military: supplementary service (보충역), not yet served · eligible for 산업기능요원

EDUCATION

Yonsei University | B.S. Computer Science · 3rd year completed, on leave of absence — 2023 –

Reigate Grammar School Vietnam · IB Diploma Programme, full scholarship — 2019 – 2023

EXPERIENCE

Software Engineer — Feb 2026 – Present

VBody (Intern Feb – Jul 2026, then contract) — Seoul, Korea

3D body-shape and motion analysis kiosks and reports for 18 institutions. Server, monitoring, and kiosk app; improved the existing job queue.

Support Diagnostics & Monitoring · FastAPI, Redis, Prometheus, Discord, Electron

- Support questions from client institutions came to me: read 1,038 messages and labeled 56 cases by outcome, then designed 55 device log events, each answering one support question (app v1.3.4) → on day one, 15 devices showed 5 causes without remote access
- After a GPU worker outage went undetected for 86 hours, designed and built a monitoring service decoupled from the API
- Capped alerts at one firing and one recovery per incident, each Discord alert carrying the failed stage and cause → 43 of 47 final scan failures (Jul–Oct 2026) alerted automatically; all 21 worker-down alerts paired with a recovery alert

Job Processing & Consistency · FastAPI, PostgreSQL (Neon), Redis

- Blocked duplicate jobs from concurrent requests with one conditional UPDATE; reassigned in-flight jobs when a worker shut down
- Compared 7 scheduling rules in simulation and shipped fair per-center dispatch → max wait for regular centers 128 → 9 min (simulated)
- Moved periodic DB access (60 s polling, 5 min status reports) to Redis Streams and latest-value writes so the serverless DB stops waking up when idle

Upload, Motion Analysis & Multi-PC Recording · Electron, MediaPipe, Python

- Rebuilt kiosk uploads with 32 MiB resumable chunks and an on-disk retry queue → completed through a 10-min Wi-Fi outage without reshooting (22 scans had been lost in the prior 90 days)
- Chose MediaPipe over RTMPose for kiosks without CUDA → browser GPU delegation cut inference from 401 to 51 ms
- Synchronized recording across 12 PCs and 40 webcams without hardware sync → all 11 measured PCs within ±20 ms; used by a university lab client for 4DGS generation

Co-founder · Operations & Automation — Aug 2025 – Apr 2026

Tapkick (solo-entry futsal matches in Hanoi) — Remote from Seoul

- Ran solo-entry matches without an app (Instagram, Google Forms, Sheets, a script that posts recruiting from the sheet); hired 2 field managers and wrote the operating guide → 63 matches, 693 participants, 145 members (57% returning), cumulative break-even 2.5 months after the first match

PROJECTS

JD code evidence | Python, Django, Chroma, Upstage Solar · github.com/inoaole/jd-code-evidence — Jul 2026

- RAG over a GitHub repo: marks each job-description requirement strong / partial / none with code evidence pinned to commit and line; the score is computed in code, and questions below 0.35 relevance are refused without calling the LLM
- Retrieval eval on 30 labeled questions → right file in the top 6 for 20 of 24; the 0.35 threshold refuses 6/6 out-of-scope and 6/24 answerable questions. Taught to ~30 students at Pirogramming

Grounded lesson notes | Python, Claude (claude -p) — Oct 2026

- LLM notes from lesson transcripts under a JSON schema; to block hallucinated claims, a code check drops any claim without a real transcript paragraph citation and keeps student quotes only if verbatim

Team workflow skills | Claude Code, Codex, GitHub Actions — Sep 2026

- 6 skills (issue → branch → commit → PR → review → release) with explicit stop conditions; CI checks the Claude Code and Codex copies stay identical

SKILLS

Languages: Python, TypeScript, SQL · **Spoken**: English (fluent; British international schools in Vietnam), Korean (native)

Stack: FastAPI, Django, PostgreSQL, Redis (Streams), Docker, Railway, GCS, Electron, React, MediaPipe

LLM: RAG (Chroma, Upstage embeddings), retrieval eval, structured output (JSON schema), Claude Code, Codex, claude -p

Activities: Pirogramming (IT club, education team), UXIM (HCI / UI·UX society)