REECE REKLAI

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Active Duty U.S. Air Force | Expected Separation: Aug 22, 2027 | Active Secret Clearance | Willing to relocate

TECHNICAL SKILLS

Languages: Python, TypeScript, Go, SQL
Frameworks & Tools: OpenCV, PyQt6, Flutter, REST APIs, Git, CI/CD, Linux, PostgreSQL, AsterixDB, Raspberry Pi

PROFESSIONAL EXPERIENCE

Embedded Linux Software Engineer (Additional Duty) — 2025 – Present

United States Air Force — Yokota Air Base, Japan

- Developed and deployed a Raspberry Pi–based 3-camera blind-spot system (Python, PyQt6, OpenCV) for aircraft cargo vehicles; a 6-month trial recorded zero loading/unloading incidents — down from 3–5 the prior year (~$70K each) — and led to selection for Air Force–wide deployment.
- Engineered a ~$2K off-the-shelf install kit with sub-10-minute installation versus ~$25K commercial systems; trial results drove approved expansion from 1 to 8 vehicles.
- Kept the blind-spot display running through camera failures — stale-frame detection, bounded worker restarts, hot-plug reattachment — no operator reboot needed.

Aerospace Ground Equipment Technician — 2023 – Present

United States Air Force — Yokota Air Base, Japan

- Kept 668 pieces of ground-support equipment ($21.7M) mission-ready for 33 aircraft — 3,200 inspections, 950 repairs, and 1,500 equipment deliveries — supporting 15,700 flights and 31,500 flying hours.
- Restored a failed generator in under an hour during live operations by isolating the fault and replacing the voltage regulator and fuel pump.

Software Developer — 2022 – 2023

Walla Walla University — Walla Walla, WA

- Built a medication administration record (MAR) simulator from the ground up with three developers, now in active use by 200+ nursing students.
- Designed dual-role user interfaces in Flutter for web and tablet: an instructor view for configuring simulated patient histories and a student view for logging dosages and tracking inventory, secured with Azure SSO and REST APIs for role-based access.
- Wrote ~200 unit and integration tests plus ~1,000 lines of developer documentation, improving reliability and reducing onboarding and maintenance effort.

Research Assistant — 2021 – 2022

Walla Walla University — Walla Walla, WA

- Enabled an Apache AsterixDB version upgrade by migrating ~2,000 lines of AQL and automation to SQL++, moving the research cluster off the old query language without a rewrite.
- Replaced a manual Bash per-node process with Python automation for multi-node AsterixDB clusters (deploy, start, stop, erase), cutting setup ~50% and saving 15–30 minutes a day across 2–5 concurrent experiments.

PROJECTS

Blindspot Monitoring — 2025 – Present

Python, Raspberry Pi, OpenCV, PyQt6

- Built a multithreaded V4L2 capture pipeline — one thread per camera with newest-frame-wins delivery — to process three concurrent MJPEG USB streams with hot-plug support and dynamic frame-rate control on constrained hardware.
- Implemented CPU and temperature monitoring to prevent thermal throttling, plus zero-configuration device discovery, concurrent camera validation, and exponential-backoff reconnection.

Military Spouse Business Review Application — 2026 – Present

Power Apps, SharePoint, Microsoft Teams

- Cut military-spouse business review cycles from ~75 days to 30–45 days by building admin tooling for the on-base approval app — creating and removing agencies, assigning members, auto-sorting by agency and personnel — now live with all 6 on-base agencies.

EDUCATION

Bachelor of Science in Computer Science, GPA 3.5 — 2019 – 2023

Walla Walla University — Walla Walla, WA