

Benjamin Fukuda

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TECHNICAL SKILLS

Languages: Python, Java, C, SQL

Tools & Platforms: Git/GitHub, Ansible, Power BI, Linux, SSH, Bash

Libraries & Frameworks: PySide6, NumPy, Pandas, Matplotlib, PyTorch, scikit-learn

Concepts & Methods: Data Structures & Algorithms, Object-Oriented Design, Machine Learning, Agile/Scrum

EDUCATION

Colorado State University — Fort Collins, CO *Dec 2026*

B.S. Computer Science, College of Natural Sciences · GPA 3.1

Relevant Coursework: Compiler Construction, Deep Learning, Software Engineering, Software Testing, Algorithms (Theory & Practice), Database Systems

EXPERIENCE

Solidigm - Validation, Quality & Reliability Engineering Intern *Jun 2026 – Aug 2026*

- Built a Power BI dashboard tracking NVMe SSD health, endurance, thermals, and firmware distribution across Microsoft's ~860K-drive datacenter fleet; replaced a manual monthly report (~1 workday/cycle) and turned the recurring customer review into live, self-serve data exploration.
- Automated fleet-scale SSD firmware and VPD updates with a PySide6 + Ansible desktop app that runs drives in parallel across a server fleet, replacing per-server SSH workflows; added dry-run validation, per-drive failure isolation, and automated fleet reporting.
- Shipped an internal server-management web dashboard adopted by 4 teams to manage ~286 servers, replacing manual Excel tracking with reservations, historical utilization reporting, downtime email alerts, and rack/PDU/KVM management.
- Executed customer-specific SSD firmware updates and drive configurations, validating deployments against technical requirements and analyzing diagnostic logs to investigate NAND-level drive failures.

Gib's Bagels & Spoons - Kitchen Member *Aug 2025 – Apr 2026*

- Handled food prep and customer service in a fast-paced kitchen while attending school full-time.

Highwater Consulting Group — Sales Representative *May 2025 – Jul 2025*

- Ran face-to-face sales conversations with prospective customers, tailoring pitches and handling objections in real time to build brand awareness and drive interest.

PROJECTS

iphoneServer - Phone-to-Computer Photo Server & Desktop Companion · *Swift/SwiftUI, Rust (Tauri), Hummingbird, mDNS*

- Built an iOS app (Swift/SwiftUI) that runs an on-device HTTP server to stream a phone's photo library to any computer on the same Wi-Fi, with Bonjour/mDNS discovery, rotating access codes, brute-force lockout, and self-signed HTTPS generated on-device.
- Built a Rust/Tauri desktop companion that pairs once for a durable 256-bit token, then embeds the phone's own web UI through a localhost reverse proxy with bearer-token injection, TLS certificate pinning, and automatic reconnect on network changes.

Emotion Detection AI · *Python, PyTorch, scikit-learn*

- Trained a convolutional neural network to classify facial expressions into seven emotion categories, reaching 60% test accuracy against a 14% random baseline (human benchmark ~65%).
- Tuned model architecture and hyperparameters to improve accuracy and cut inference time; built and evaluated on a 4-person team using Git for collaboration.

PickNPull - Salvage Yard Vehicle Finder · *Swift/SwiftUI, Python, FastAPI, PostgreSQL*

- Built a full-stack iOS app that locates vehicles across salvage yards in 25 US and Canadian regions, with watchlist alerts for user-tracked vehicles.
- Designed a scheduled ingest service that diffs inventory snapshots into PostgreSQL to track vehicle arrivals and removals and trigger push notifications.