

Darius Kafayi

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EXPERIENCE

Lead Software Engineer

June 2024 - Present

WindBorne Systems | Palo Alto, CA

- Led the flight control software engineering team, building the mission control platform that powers autonomous high-altitude balloon navigation, automation, manual operations, and real-time data ingestion, while setting technical direction, conducting code reviews, and maintaining a heavy individual contribution workload
- Architected, built, and own the end-to-end atmospheric data delivery system, having routed and processed 100M+ atmospheric observations across validity checks, billable calculations, and delivery routing, supporting \$20M+ in active contracts across government agencies, national weather services, and private forecasters
- Designed and shipped a real-time tracking dashboard used by government stakeholders to monitor balloon positions, areas of interest, ETAs, and historical flight records across 7,000+ missions with automated statistical analysis
- Built an optimization-driven delivery engine using a Python microservice (CVXPY linear program) integrated with a Rails backend and React frontend, maximizing data allocation based on customer requirements and contractual constraints
- Designed and shipped a production changelog and versioning system with a corresponding interface that supports a 30+ person manufacturing team now producing 500+ units per month

Full Stack Software Engineer Intern

May 2023 - August 2023

Cisco Meraki | San Francisco, CA

- Built and shipped a real-time network debugging tool (Ruby on Rails, React) enabling clients to view and filter critical device information, collaborating closely with product to define requirements
- Integrated inter-process communication across CometD, EventMachine, Protobuf, and LittleTable to propagate live data from backend services to the frontend
- Applied test-driven development with RSpec, achieving comprehensive coverage on all new endpoints and components
- Extended 5+ API endpoints and existing service functions to improve dashboard functionality and client experience

Quality Assurance Intern

May 2022 - August 2022

HomeBreeze | Newport Beach, CA

- Designed and executed a structured QA framework covering 12+ product variants, synchronizing testing with the development cycle to catch regressions before release
- Built data-driven test suites leveraging Typeform data (URL tokens, client specs, heater configurations) to validate end-to-end product flows

Full Stack Development Intern

May 2021 - August 2021

Oneboard | Irvine, CA

- Developed filtering and content organization features in React, improving media discoverability and user retention
- Designed and implemented UI/UX improvements based on user feedback, contributing to measurable gains in engagement

EDUCATION

Purdue University

August 2020 - May 2024

Bachelor of Science in Computer Science, Minor in Spanish | GPA: 3.59 / 4.0 | Machine Intelligence Track

SKILLS

Languages: JavaScript, TypeScript, Python, Ruby, Java, C, HTML/CSS, SQL

Frameworks & Tools: React, Ruby on Rails, Next.js, Node.js, PostgreSQL, Docker, AWS, Git

Languages (Spoken): English (native), Spanish (fluent), Farsi (conversational)