Jan Kasen

hi@jankasen.com | jankasen.com | github.com/jankasen | linkedin.com/in/jankasen

Technical Skills

Programming: C/C++, Python, Go, Java, TypeScript, JavaScript, SQL, Bash
Frameworks & Tools: Next.js, React, React Native, Expo, Polars, Pandas, Node.js, Deno, Git, Docker
Data & Databases: PostgreSQL, Supabase (Edge Functions, RLS), Snappy Parquet, SQLite, pgTAP
Spoken Languages: English, Russian, Kazakh

Projects

Counter-Strike 2 Analytics & ETL Pipeline | jankasen.com/projects/cs2 Independent Project
Python, Polars, Next.js, Snappy Parquet, SQLite, Supabase

- Engineered an automated ETL pipeline parsing 1,787 matches across 65 tournaments, compressing >380 GB of raw game replays into a 472 MB partitioned Parquet datastore (>99.8% storage reduction)
- Extracted and normalized 598,000+ combat events with Polars, translating player coordinates onto 2D radar maps and implementing 3-second sliding-window algorithms to attribute trade kills
- Implemented a resilient tournament-data scraper with randomized request scheduling and persistent SQLite state
- Shipped a public Next.js dashboard with server-side rendering and Canvas charts for player performance trends

Flight Tracker Mobile App | github.com/jankasen/flight-tracker Independent Project
Expo, React Native, TypeScript, PostgreSQL, Supabase, Deno

- Developed a cross-platform flight tracker (iOS, Android, web) with private travel logs and custom route maps
- Protected external flight APIs behind Supabase Edge Functions with per-user and IP rate limits, caching provider responses for 15 minutes to prevent redundant lookups and reduce upstream costs
- Enforced Postgres Row-Level Security to isolate user flight records, normalizing routes against a 4,134-airport dataset
- Automated CI/CD workflows via GitHub Actions to run 35 Vitest unit tests, API tests, and database security rules

NBA Player Analytics & Salary Cap Explorer | jankasen.com/projects/nba Independent Project
Python, Next.js, TypeScript, PostgreSQL, Supabase, scikit-learn

- Deployed a full-stack platform processing 36,000+ player records across 80 seasons with interactive career charts
- Normalized 40+ years of player contracts as a percentage of the team salary cap, enabling fair cross-era payroll comparisons, roster payroll simulations, and historical spending visualizations
- Trained career forecasting models with strict chronological splits (1976–2024), resetting rolling feature windows on non-consecutive seasons to prevent future performance stats from leaking into training
- Designed a two-stage model predicting retirement risk and performance decline to produce bias-adjusted forecasts

Leadership & Community

President, Russian-Speaking Student Association, UCLA May 2024 – June 2026

- Rebuilt the organization to 80+ members and 30–40 active participants through targeted campus outreach
- Managed operational budgets, university funding, and venue logistics for cultural and community programming
- Co-founded the Central Asian Student Union at UCLA to expand cultural representation and host joint campus events

Education

Northeastern University Expected May 2028
M.S. in Computer Science Vancouver, BC

University of California, Los Angeles (UCLA) June 2026
B.S. in Computer Science | Minor in Anthropology Los Angeles, CA

Relevant Coursework: Algorithms & Complexity, Distributed Systems, Operating Systems, Data Management Systems, Compiler Construction, Computer Networks, Software Engineering, Formal Languages & Automata, Computer Architecture