

# Alexander Peczon

## Mission



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BakedSoups



apeczon

Software engineer with experience building full stack applications, distributed workflows, and recommendation systems across cloud, data, and customer facing platforms.

## Education

### University of San Francisco

Graduated 2026

B.S. Computer Science

Relevant Coursework: Linear Algebra, Statistics, Vector Calculus, Software Engineering, Computer Architecture, Algorithms

## Experience

### Future Tilt - Software Engineer

Jul 2025 – Present

Built scalable software systems and workflow automations

San Francisco

- Developed an AI email Template platform using React, FastAPI, Docker, and Google OAuth, reverse engineering Klaviyo template requirements to generate editable marketing emails synchronizing assets from Google Drive.
- Engineered an event synchronization service using AWS Lambda, BigQuery, and webhook-based APIs to coordinate campaign data across Trello, Klaviyo, and internal systems, reducing campaign maintenance overhead by 50%.
- Collaborated with the Data Consultant to build microservices using AWS Lambda, Airbyte, and BigQuery that integrated Shopify and Klaviyo data into internal workflows, enabling low-cost analytics and reporting across datasets supporting 20M+ daily queries.

### MAGICS Lab - NLP Researcher

Mar 2025 – May 2026

Built datasets and models for explainable sentiment analysis

San Francisco

- Built parallelized ETL pipelines in Go across 5 virtual machines to generate entity-aware NLP datasets using graph-based bag-of-words relationships and DuckDB analytical querying.
- Developed and evaluated an explainable aspect-based sentiment analysis framework using REBEL, PyTorch, and graph-based NLP methods, improving sentiment classification performance by 20% over VADER.

### Alaris Security - Junior Fullstack Engineer

Aug 2025 – Nov 2025

Developed cybersecurity automation and compliance systems

San Francisco

- Built customer-facing compliance tooling using Next.js, React, and React-PDF, generating NIS2 reports that linked agent generated security findings from millions of raw SOC2 logs from 4 API end points to reduce SOC2 log noise.
- Established reusable tRPC service patterns across a Next.js monorepo, consolidating 50+ frontend database calls into typed backend procedures and improving maintainability, rendering performance, and end-to-end type safety.
- Designed orchestration workflows using Prefect and Airflow to normalize and integrate CrowdStrike, Elastic, and Microsoft Defender telemetry while powering an agent-driven cybersecurity analysis platform that reduced investigation time from 10 hours to approximately 1 hour.

## Projects

### NextSteamGame.com Recommendation Engine (Open Source)

Feb 2025 - May 2025

Explainable Similarity Search Recommendation Engine

San Francisco

- Designed a multi-stage data pipeline that transformed 80,000+ Steam games and millions of review records into a searchable recommendation system, separating semantic extraction, ontology construction, retrieval, and runtime serving into independently deployable stages.
- Built an explainable recommendation engine using PostgreSQL, Qdrant, ChromaDB, ModernBERT, and FastAPI, allowing users to discover games through gameplay, soundtrack, atmosphere, and thematic similarities rather than store-defined genres, growing to 30K+ users!
- Reduced recommendation latency by precomputing large-scale vector similarity rankings and migrating runtime workloads to Postgres-backed FastAPI services deployed through Dockerized infrastructure.

### Maldemic Simulator

Jan 2025 - May 2025

Stochastic Epidemiological Modeling and Visualization

San Francisco

- Developed a stochastic pandemic simulator using Markov-chain mobility models and SIR disease dynamics, earning 2<sup>nd</sup> place at the BLOOM Hackathon.
- Built a Python-powered Godot visualization platform that rendered real-time disease spread across a 3D globe for public health education.

## Technical Skills

Languages: Python, Go, SQL, TypeScript, JavaScript

Frameworks & Libraries: PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, React, FastAPI

Infrastructure & Data: PostgreSQL, BigQuery, MongoDB, ChromaDB, Qdrant, Docker, Kubernetes, AWS Lambda, Airflow, Prefect, DuckDB

Tools & Platforms: Debian, Ubuntu, Git, Nginx, AWS, Google Cloud, Shopify API, Klaviyo API, Airbyte