Jeremy Yunis

Software Engineer · Real-time logistics, agent authorization, and compliance systems

Saint Paul, MN | jeremy@klinedrive.com | linkedin.com/in/jeremy-yunis-36b98220

Summary

Shipped production policy enforcement for agents moving funds across blockchain assets and US equities. Founding engineer of a fleet-management platform handling location ingest, training, and compliance for 30,000+ last-mile delivery drivers, through its acquisition in 2023 by Descartes Systems Group.

Experience

Senior Developer → Principal Engineer, WireUp – Remote Aug 2025 – present

- Designed and shipped an authorization layer for agents to move funds on behalf of users, supporting notify-then-execute and auto-approve scenarios with session-scoped keys, on-chain policy enforcement, spending caps, and asset allowlists; TypeScript, React Native (iOS/Android), and Firebase/Firestore.
- Built an MCP server and connect API to authorize external agents to act on users' funds under each user's policies, across Solana smart wallets and US brokerage. Agent exchanges backend-issued connect code and receives a short-lived refreshable JWT to authorize requests to the MCP.
- Proposed the yield auto-strategy feature in response to a call for product ideas, then led the team that built it. The strategies allocated users' idle funds across several lending and staking protocols, based on their risk profile, with heuristics on when to perform reallocations and exits.
- Built the team's AI-assisted development processes, including a shared memory system (pgvector database + nomic-embed for semantic search), review and implementation skills, and a worktree manager TUI for parallel workflows.

Founding Engineer → Development Lead, GroundCloud (acquired by Descartes Systems Group, 2023) – Saint Paul, MN Oct 2016 – July 2025

- Built fleet-management platform for FedEx contractors on GCP with Django, DRF, PostgreSQL, and Vue.js.
- Designed and built route optimization pipeline: upload/pull manifest (JSON/CSV/PDF), geocode addresses, optimize stop order via TSP (pgRouting, later GraphHopper), route via Google Directions, push optimized route to driver's in-truck iPad.
- Built geospatial features on PostGIS/pgRouting: wrote a query flagging stretches of road where drivers were speeding by matching per-location GPS speed reports against public speed-limit data, with manager-defined speed limit overrides; manager-drawn "priority zone" polygons that grouped stops into zones before route optimization; route extent bounding boxes, direction polylines, and breadcrumb trails of driver history.
- Helped scale infrastructure from 15 drivers on launch day to 30K+ at time of acquisition. RabbitMQ/Celery for ingestion, pgbouncer for connection pooling, and Redis for task results and caching. Front-loaded driver "current location" updates so fleet managers' maps stayed true even during queue backlogs.
- Hit Postgres transaction wraparound during peak hours; the database went read-only and took 24 hours to recover via a full vacuum of the 2TB database. Co-designed the long-term prevention with our ops lead: table partitioning, stricter autovacuum settings, monitoring on max frozen transaction id, and pg_repack for online table rewrites.
- Performed Postgres 9.5 -> 13 upgrade of a 2TB active/passive cluster: trialed on backup cluster, then `pg_upgrade --link` on the primary, rebuilt replica secondary with snapshot of upgraded production volume. ~20min total production downtime.
- Helped migrate from Ansible-configured VMs to GKE containers to auto-scale web and task workers for variable loads. Cut near-weekly major issues to minor issues quarterly with minimal customer disruption.
- Hired and helped lead team that grew from 2 to 12 engineers.

Software Engineer (contract-to-hire), Cray Inc. – Saint Paul, MN Oct 2013 – Oct 2016

- Designed and built pluggable install framework replacing Cray's legacy installer, used by Cray product teams to bundle their products onto the SMW (System Management Workstation) and Cray Linux Environment; Python CLI suite running on SUSE Linux, YAML install config. Shipped to systems at Oak Ridge, Los Alamos, and Sandia.
- Built the SMW's install and upgrade path around atomic chroot installs into Btrfs subvolume snapshots, so sysadmins could switch versions forward and back; also built HA using Pacemaker/Corosync, SAN storage provisioning (LVM storage sets, multipath), and a compute-node image builder.

Application Developer (Freelance), Kline Drive, LLC – Saint Paul, MN May 2010 – Sept 2016

- Built track-and-trace system for brand-protection firm Sekuworks, tracking chain of custody for medication shipments to catch diversion, theft, and counterfeiting; PHP and Microsoft SQL Server.
- Built fleet-wide automatic updates, golden-image Ubuntu Linux installer, and multi-camera ffmpeg capture for Ameritrak's rugged in-vehicle computers on MnDOT snowplows and Lorenz Bus school buses.

Founder, List Armor LLC – Saint Paul, MN Jan 2012 – Sept 2026

- Built a CAN-SPAM compliance platform, faster and cheaper than the incumbents, for affiliate networks managing opt-out lists across affiliates and campaigns. Bulk-loaded mailing and suppression lists into indexed Postgres temp tables and scrubbed them with SQL joins, returning results as CSV; Django, PostgreSQL, JavaScript, running on AWS and DigitalOcean.
- Ran it solo for 14 years; rebuilt platform in 2025 using Django, DRF, and HTMX, with automatic Docker deploys to Railway on green CI.

Skills

Languages: Python, TypeScript, JavaScript, SQL, PHP, Bash

Data: PostgreSQL (PostGIS, pgRouting, pgbouncer, pg_repack, pgvector), Redis, Microsoft SQL Server, Firestore

Infrastructure: Kubernetes (GKE), Google Cloud, Railway, RabbitMQ/Celery, Ansible, Linux (SUSE, Ubuntu), Btrfs, LVM

Agents & Policy: MCP, agent authorization, session-scoped keys, spending caps, asset allowlists, JWT

Frameworks: Django/DRF, HTMX, Vue.js