

Arshdeep Dhaliwal

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Founder and full-stack engineer with 5+ years operating businesses across retail, logistics, and fintech. Built and shipped two production AI systems from scratch — 420Ledger, a multi-tenant cannabis accounting SaaS, and StatPulse, a live sports intelligence dashboard. Hands-on across the full stack: backend APIs, database architecture, AI agent integration, cloud infrastructure, and compliance automation. What I lack in a CS degree I make up for in determination, hard work, and shipped code.

EDUCATION

Kean University — Union, NJ

B.S. in Supply Chain Management & Information Systems | Expected May 2026

GPA: 3.51 | Dean's List: Fall 2024, Spring 2025, Fall 2025 | 109 credits complete

Relevant Coursework: Financial Accounting, Business Analytics, Management Information Systems, Operations Management, Supply Chain Management, Entrepreneurship

M.S. in Computer Science — AI/ML (Planned) | Target: Fall 2026

PROJECTS

Founder & Full-Stack Engineer | 420Ledger | 420ledger.com | May 2025 – Present

Product Overview

- Built a production-grade, multi-tenant accounting SaaS purpose-built for cannabis businesses — shipped 50+ features across accounting, tax compliance, AI automation, and client management in under a year
- Running live at app.420ledger.com and api.420ledger.com on Railway/Vercel with real infrastructure: JWT auth, 2FA/TOTP, RBAC, rate limiting, audit logging, and PII redaction middleware
- \$40–65/month infrastructure cost supporting multi-client workflows with Plaid bank feeds, Cloudflare R2 file storage, SendGrid email automation, and PostgreSQL with 15+ Alembic migrations

AI Agent Layer

- Integrated Claude API (claude-sonnet-4-6) to power five client-facing AI agents: Ask Your Accountant (reads live financials and answers questions), Cash Flow Snapshot, 280E Explained, Tax Estimate Explainer, and Document Upload Analysis
- Built three admin AI agents with web search: New Client Analysis (generates opportunity reports from prior returns), Compliance Monitor (weekly deadline digest across all clients), and Tax Law Monitor (flags HIGH/CRITICAL cannabis tax law changes)
- Implemented OpenAI-powered transaction categorization engine with approve/reject workflow and anomaly detection flagging unusual transactions for admin review

Accounting & Compliance Engine

- Engineered a full double-entry ledger with real-time trial balance validation, month-close locking, 280E allocation engine, MACRS/straight-line depreciation, and recurring journal entry automation
- Built a 27-state 280E decoupling engine with NJ confirmed (\$129K benefit on demo client) and AZ correctly excluded — handles state-level tax treatment differences automatically per client
- Implemented complete tax workflow: NJ CBT-100, NJ state return, federal worksheet, Form 941 generation with EFTPS deposit log, estimated tax calculator, 1099-NEC prep, W-2 summary, K-1 by owner, and payroll 280E classification

Infrastructure & Integrations

- Architected full-stack system: FastAPI backend, Next.js 14 frontend, PostgreSQL with SQLAlchemy ORM, Cloudflare R2 file storage, Railway deployment with environment-variable-driven credentials
- Built data ingestion pipelines for Plaid bank feeds, multi-format bank/POS/payroll CSVs (ADP, Paychex, Gusto, Dutchie, Flowhub, Treez, Square), and METRC cannabis track-and-trace CSV import with fuzzy reconciliation
- Generated branded PDF deliverables using ReportLab for 15+ document types including Form 941, Form 2848, Form 8821, monthly P&L, 280E workpapers, engagement letters, and quarterly tax packages

Reconciliation & Document Management

- Built a 3-way reconciliation engine cross-referencing POS sales, bank deposits, and METRC records daily — flags UNDEPOSITED_CASH, UNEXPLAINED_DEPOSIT, and UNRECORDED_SALE with LOW/MEDIUM/HIGH/CRITICAL severity
- Implemented 36-category document management system with client/admin workflows, file-level review locking, SendGrid-triggered monthly/quarterly request cadences, and Cloudflare R2 storage with environment-separated prefixes

Founder & Full-Stack Engineer | StatPulse | statpulse-alpha.vercel.app | *Apr 2026 – Present*

Product Overview

- Built a live sports intelligence dashboard covering NBA, NFL, MLB, NHL, and UFC — real-time scores, box scores, playoff series tracking, and AI-generated game insights, deployed on Vercel with Upstash Redis caching
- Integrated ESPN public API for live game data, per-game top performers, and box scores across all five sports — no API key required, zero data cost
- Built UFC fight cards with tale of the tape, per-fight fighter stats pulled from ESPN athlete endpoints, and AI-powered per-fight matchup analysis

AI & Infrastructure

- Implemented Groq/LLaMA AI insight engine generating analyst-style game breakdowns on demand — fires only on user click, zero automatic API calls to control costs
- Built Vercel cron job architecture for scheduled background processing with Upstash Redis as persistent storage layer — picks, predictions, and cache all server-side
- Deployed full Next.js 14 app with five API routes (sports, boxscore, fighter, insight, cron) and environment-separated configuration on Vercel

EXPERIENCE

Operations & Inventory Manager | Smoke Lovers Inc. (Family Business) | Perth Amboy, NJ | *Jan 2023 – Present*

- Manage \$1M+ revenue retail operation with full financial oversight including P&L, vendor negotiations, and procurement strategy
- Scaled daily revenue from \$600 to \$3,000 through SKU-level inventory reconciliation, demand-driven purchasing, and margin optimization

Logistics Business Owner | Independent Owner-Operator | Avenel, NJ | *Mar 2020 – Dec 2022*

- Owned full P&L for independent freight business — managed routing, scheduling, fuel cost optimization, and client SLAs across 7-day operational schedule
- Maintained consistent profitability through tight cost control and long-term client reliability

Founder | FULLSENDNJ | New Jersey | *Jul 2018 – Jun 2022*

- Founded and operated brand generating \$150K+ annually — managed product sourcing, fulfillment, pricing strategy, and vendor partnerships end to end

SKILLS & CREDENTIALS

Technical: FastAPI, PostgreSQL, Next.js 14, Python, JavaScript, SQLAlchemy, SQL, Alembic, Cloudflare R2, Railway, Vercel, Plaid, SendGrid, OpenAI API, Anthropic Claude API, Groq API, ReportLab, JWT/2FA/RBAC, Upstash Redis

Credentials: PTIN (active), EFIN (active)

Languages: English (native), Punjabi (native), Hindi (fluent), Urdu (fluent), Spanish (conversational)