

# ZACH ALVAREZ

Senior Technical Commercial Operator · AI-Native

San José, CA · zcalvarez@gmail.com · 925.963.6500 · Portfolio: zachalvarez.com

---

## SUMMARY

---

**Senior technical commercial operator** with 24 years across solar industry sales, technical sales, field application engineering, and customer support at five multinationals (US, China, Austria, Israel, Korea). Director of Sales (Tigo Energy) grew territory from \$250K to \$15M+; first salesperson to a \$1M revenue quarter and a \$1M revenue month; present in executive decision-making during the company's IPO preparation. Current technical leadership at Q Cells North America: authoring the formal customer support escalation architecture and co-managing the 17-person team that runs it.

**Over the last several months**, deployed Claude and other AI tools across multiple domains as a builder and architect, producing a 74-module individual-baseline measurement engine (**43 USPTO provisional applications filed April 2026**), AI-safety research drafts (IBTR / TRIL / DALD), a California advisory practice in pre-launch using Claude as production work product backed by a \$1M Professional Liability policy, and five vertical extractions of the engine's primitives. **Two of the five extractions closed cleanly on pre-declared bars — the discipline of falsifying my own work before claiming results.**

*Open to three role tiers at AI companies: Product Support / Customer Support Engineering Management, Customer Success Management, and Enterprise Sales / Account Executive — and to Solutions Engineering, Forward-Deployed Engineering, or founding roles at AI startups where deep AI understanding pairs with operational instinct and customer-facing credibility.*

## CORE CAPABILITIES

---

Enterprise B2B customer support & escalation architecture · People management (direct reports across multiple roles) · Strategic account & executive-stakeholder management · GTM partnership & cross-functional collaboration · Technical sales & pre-sales engineering · Multi-stakeholder negotiation (C-suite to field) · Salesforce / Zoho administration · API and technical-documentation literacy (Claude in production deployments) · Production AI / LLM workflow design · Self-taught systems architect (architects production AI systems and directs AI-assisted builds — the angle, not a gap) · Multinational corporate operations (US / China / Austria / Israel / Korea) · UL 1741 / NEC code · IPO-preparation operational exposure

## PROFESSIONAL EXPERIENCE

---

**Sr. Field Applications Engineer · Q Cells North America (Korea)** 2022 — Present

- Co-manage a 17-person FAE team with 5 direct reports; lead technical onboarding and escalation oversight for the Axia by Q Cells and New Homes installation entities. Title transition into formal management role currently in progress.
- Authored the formal customer support escalation architecture currently in production use across the enterprise support organization.
- Designed cross-manufacturer pre-truck-roll diagnostic triage architecture: translating multi-vendor escalation patterns into structured customer-service decision-support.
- Primary technical trainer for the ESS suite; full-cycle participation in Gen 2 / Gen 3 ESS and AC module NPI, including lab and field testing against third-party products (Tesla, Enphase, FranklinWH).

**Director of Sales, C&I · Tigo Energy (Israel)** 2017 — 2022

- Direct people manager of 4 reports: owned hiring, performance coaching, day-to-day capacity management, and career development conversations for the team.
- Grew assigned territory from \$250K to \$15M+ in annual revenue. First Tigo salesperson to achieve \$1M revenue in a single quarter, then \$1M in a single month.
- Participant in Tigo's **IPO preparation period** — present in executive decision-making meetings during the run-up to public listing. Operational exposure to legal, compliance, and liability apparatus assembly around an operating business.
- Global Salesforce administrator for the sales organization; led platform improvements, adoption, and reporting across operations and field teams.

- Owned OEM channel relationships (SMA, Sungrow, others) and tier-1 EPC / developer accounts through extended technical vendor qualification processes, supporting customers from executive negotiation through post-sales technical resolution.

**Regional Sales Manager, Northern CA & Pacific NW** · *Fronius USA (Austria)* 2017

- Developed the Northern California and Pacific Northwest region with EPCs, installers, and channel distribution partners (CED Greentech, Soligent, Sonepar, WESCO, Proinso, AEE). Customer-facing technical and commercial leadership across the territory.

**Western Regional Sales Manager** · *Sungrow USA (China)* 2015 — 2017

- Early participant in establishing Sungrow as a competitive leader in commercial and utility PV inverters; drove month-over-month revenue growth Q4 2015 through Q1 2017, working tier-1 and tier-2 EPCs and developers from executive decision-makers through engineering and procurement.
- US administrator of Zoho CRM rollout across sales, service, and administrative teams; contributed to company sales and operations procedures.

**Sales & Operations** · *AMtec Industries Inc. (US)* 2012 — 2015

- Managed every facet of the BOS product line release cycle — preliminary design, marketing, production, sales, supply chain, customer service — including custom solutions for the then-emerging string inverter market.
- Led customer negotiations with large EPCs including OEM contract opportunities; designed quotes and custom product specifications. Initiated Sugar CRM implementation and employee training.

**Industrial Outside Salesman** · *Platt Electric Supply (US)* 2006 — 2011

- Outside sales for electrical, lighting, wire, and power distribution and control packages; quoted, specified, and secured product packages for contractor customers across an assigned territory.

**AI DEVELOPMENT WORK (SINCE MARCH 2026)**

---

- PIE / IBTR / TRIL / DALD** — 74-module individual-baseline measurement engine with HSAPI open-standard interface. DALD module addresses deceptive-alignment divergence detection for deployed AI systems whose internals aren't accessible. **43 USPTO provisional applications filed April 2026** (filing IDs 64036946–64039431); non-provisional conversion decisions pending counsel review.
- The Installer's View (theinstallersview.com)** — worked example of liability-aware AI integration: California advisory practice using Claude as production work product. **\$1M Professional Liability (Hiscox) + \$250K Cyber / Media** backstopping AI-produced work; attorney-reviewed Master Engagement Agreement; nine-dimension content audit; AI usage codified across Privacy Policy, Terms of Service, and Engagement Agreement. Pre-launch May 2026.
- Parallax (working title)** — TIV's analytical platform. Python + Streamlit + SQLite orchestrating **16 authoritative public data sources** (NREL, Google Solar API, CSLB, CFPB, CourtListener, SEC EDGAR, others) across a 10-lens analytical framework with vision-model OCR. AI drafts findings; principal verifies every numerical claim. Full audit trail. Fifth extraction of PIE primitives. Q3 2026 operational launch target.
- WindPIE** — cross-domain validation of PIE primitives against the CARE-to-Compare wind turbine dataset. SHA-256-hashed pre-registration locked hypothesis and decision rules before any analysis. **Closed cleanly on null** when individual-baseline detection failed to clear the pre-declared bar against the fleet-mean baseline.
- Cardinal (EU AI Act reference architecture)** — reference architecture covering EU AI Act Articles 5, 9, 10, 12, 13, 14 with Articles 11, 15, 17 explicitly excluded as discipline. Multi-path commercial strategy with three identified warm EU contacts and grant-back licensing terms; IP integration with 43 USPTO provisional filings. **Killed ~24 hours after a self-commissioned competitive ultrareview surfaced Microsoft Agent Governance Toolkit (free, MIT-licensed) on or around May 8, 2026.** Discipline rule encoded: competitive landscape ultrareview is a gate before commercial commitment, not a checkbox after sophisticated build.
- FretMind** — live consumer reference app for the PIE engine. Web Audio API, MediaPipe Hands, Basic Pitch (Spotify), five LLM-routed coaching personas. Validated VTACA breath-hold detection and PBITE intervention gating in two live capture sessions, April 2026.

**CREDENTIALS & RECOGNITION**

---

- Direct people management** at Tigo (4 reports) plus current technical leadership and team co-management at Q Cells (5 reports under co-management of 17-person FAE team); title transition into formal Q Cells management role in progress. Multinational operating exposure across US, China, Austria, Israel, Korea. Salesforce administrator (Tigo); Zoho CRM administrator (Sungrow).