

Engineering Executive | Platform, Data & Applied AI | Climate & Complex Systems

Systems-oriented engineering executive with 20+ years turning research-intensive, operationally complex technology into reliable platforms, scalable organizations, and measurable business outcomes. Leads across software, cloud infrastructure, data pipelines, geospatial systems, AI/ML, IoT, hardware, and customer-facing products. Trusted to translate among executives, product, operations, scientists, customers, and engineering teams—combining architectural judgment with disciplined execution and calm, accountable leadership.

LEADERSHIP STRENGTHS	Platform strategy — Platform convergence, architecture alignment, integration surfaces	Engineering leadership — Multi-team organizations, leader development, distributed execution
	Operational scale — Reliability, observability, automation, cost and risk reduction	Data + AI — Geospatial pipelines, production AI/ML, governance, developer leverage
	Product + GTM — Product councils, feasibility, customer translation, enterprise solutions	Complex systems — Aerospace, sensing, IoT, cloud, hardware/software integration

SELECTED IMPACT	Organizational scale: Built a coherent operating model across Data Pipeline, Applications, and Infrastructure teams; developed leaders and distributed tactical ownership.	Enterprise growth: IoT and data platforms for 20+ customers; rapid R&D supported 6+ multimillion-dollar deals and two new revenue lines.
	System economics: Reduced sensing-platform production and fielding cost 80% while improving reliability and throughput 10×.	Geospatial delivery: Reduced a six-month/\$1.8M terrain-production cycle to under four weeks/\$100K per project.

EXPERIENCE	Director of Software Engineering; Product Architect following acquisition Insight M	09/2022–Present
	<i>Methane mitigation, geospatial analytics, and mission-critical environmental data systems</i> - Direct a distributed engineering organization across data pipeline, applications, and infrastructure; own technical strategy for reliability, AI integration, automation, cost control, and platform unification. - Replaced reactive firefighting and concentrated system knowledge with stronger observability, shared ownership, documentation, cross-training, and repeatable operational support. - Designed a three-team structure, developed emerging leaders, delegated tactical ownership, and established delivery cadences that allowed the organization to scale without making its director the bottleneck. - Lead technical strategy within the Product Council, connecting architecture, feasibility, investment sequencing, go-to-market priorities, and customer commitments. - Partner with executive leadership on organizational design, staffing, risk, technical diligence, and integration planning; sustained delivery and team continuity through restructuring and leadership change.	Remote · Portland, OR

Solutions Architect

Modzy

Enterprise AI/ML production operations

- Designed reusable AI/ML integration frameworks and customer deployment patterns for production model serving, monitoring, tuning, and enterprise adoption.
- Translated business problems into deployable AI solutions through readiness assessments, proofs of concept and maturity, implementations, technical advisory, demos, documentation, and talks.

11/2020–06/2022

Remote · Portland, OR

Director of Solutions Engineering / IoT Systems Architect

Uptake

Industrial IoT and asset-integrity platform

- Recruited and led teams delivering IoT hardware, cloud architecture, data ingestion, device management, and machine-learning integration for 20+ enterprise customers.
- Created and led the Sales & Solutions Engineering function; after one year, opportunities involving a Sales Engineer were 60% more likely to close.
- Directed R&D and special-project teams whose rapid systems supported 6+ multimillion-dollar deals and opened two revenue lines; reduced recurring customer costs by six figures through roadmaps and cloud optimization.

02/2015–10/2019

Chicago, IL

Director, Instrumentation & Simulation Technology

SRI International · TS clearance

Aerospace and defense R&D, real-time sensing, and geospatial training systems

- Led multidisciplinary R&D for FlexTrain real-time asset tracking; reduced production and fielding cost 80% and improved reliability and throughput 10x, helping establish the economics for a successful spinout.
- Introduced geospatial and virtual-terrain workflows that reduced data collection and terrain-generation delivery from six months/\$1.8M to under four weeks/\$100K per project.
- Productized human-machine interaction and ontology-driven simulation concepts; bridged research, systems architecture, field operations, manufacturing, and program leadership.

10/2004–10/2014

Menlo Park, CA

VENTURES & ADVISORY

explor.pro

FOUNDING TECHNICAL LEAD

Architected the full-stack and application foundation, established the technology roadmap, assembled a remote development team, and directed delivery of a production-quality cycling-platform MVP in under six months.

gearbeta.com

FOUNDER / TECHNICAL ADVISOR

Built a consumer gear-longevity platform from concept through architecture, implementation, recruiting, investment, partnerships, and sustainment.

Chalkd · Keg-Minder ·

Matterport · Adjacent

Applications

FOUNDER / ARCHITECT / ADVISOR

Built and advised mobile, web, sensing, and IoT products across product design, architecture, implementation, recruiting, manufacturability, and ruggedization.

PATENTS, PAPERS & PRESENTATIONS

- **Inventor:** Mesh Network Routing Based on Availability of Assets (US20170075778); Local Analytics Device (US20170163515); Provisioning a Local Analytics Device (US20170353353A1).
- **Author:** *Self-Aware Virtual Environment (SAVE)* and *Human-Collective Training for Tactical Operations* (2012).
- **Presenter and developer advocate:** production AI/ML, real-time AI at the edge, unstructured data, face recognition, and enterprise integrations with Snowflake and Tableau.

EDUCATION

M.S., Aerospace Engineering, 2004 · California Polytechnic State University, San Luis Obispo
Systems engineering, Kalman filtering, and control theory. Lecturer to 400+ students in aerospace, spacecraft design, systems theory, and advanced dynamics.