

CEO/Executive Director doubly equipped with experience in software/hardware product engineering and STEM education program leadership, plus degrees in Engineering/Aerospace from Stanford and USC.

- Equally strong drives toward innovating engineering breakthroughs and educating the next generation of Science and Technology luminaries in the workplace, online, and in the classroom.
- Product strategy, design, and development in EdTech, Robotics, Autonomous Vehicles, MedTech, Biotech, Video, and Telco as a CEO, Engineering Director, and Design Agency Consultant.
- Outstanding ability to evangelize complex ideas and build alliances with executives, BODs, offshore partners, multi-disciplinary engineers, and non-technical administrators, regulators, and students.
- Foundational R&D/Engineering work in laser measurement tools, electronic respiratory flow meters, missile simulation software, and nuclear reactor optimization solutions.
- Strong proponent of evidence-based decision-making and analytics to power investment and strategy.

Burlingham Advisory

National | 2017-Present

Principal

- Independent Director serving on several boards driving strategic growth (see page 4).
- Executive Leadership Coach for ambitious leaders to break through challenges, accelerate their growth, and achieve meaningful, sustainable success.

CuriOdyssey

San Mateo | 2020-2025

PRODUCT: The leader in early science learning in San Mateo County using phenomena- and inquiry-based learning

ANNUAL BUDGET: \$7M **STAFF:** 55

Executive Director

Expand the reach of this beloved institution to impact children, especially those furthest from opportunity, throughout San Mateo County and the San Francisco Bay Area.

LEADERSHIP HIGHLIGHTS

- **Strategic Turnaround:** Recruited to revitalize CuriOdyssey after a decade of stagnation and deficit spending. Implemented a three-year strategic plan to achieve financial stability, grow the audience, and position the organization as a leader in early science learning.
- **Financial Success:** Emerged from a decade of deficit spending in FY20, exceeding revenue targets by \$0.5M despite COVID. Maintained profits in FY21 through FY24 while increasing organizational investments by \$0.5M.
- **Crisis Management:** Safely navigated a 90-day closure during FY23 due to storm damage, securing timely grants and managing expenses to limit losses.

PROGRAM & ORGANIZATIONAL DEVELOPMENT

- **STEMCorps Initiative:** Launched a new education program connecting educators, mentors, and community partners with underserved youth, empowering them to engage in STEM learning. Secured \$500K in funding for an 18-month pilot (now in its fourth year) with support from major sponsors like Gilead, Genentech, and Merck.
- **Diversity, Equity, and Inclusion (DEI):** Established a DEI leadership team, launched an internal consulting practice, and conducted an equity audit. Collaborated with the board to form a DEIB committee and grow the Board of Directors from 14 to 20 members.

CAPITAL DEVELOPMENT & EXPANSION

- **Campus Development:** Led fundraising efforts for a state-of-the-art early science learning center, raising \$1.7M in the first year and completing the capital campaign after nine years. Opened the new Physics in Action Playground, "Whooosh!" and expanded classroom space with the Bay Gallery & Labs (3000 sq ft).
- **Future Planning:** Initiated the capital campaign feasibility study for an expanded North American River Otter Habitat, including selecting a design-build firm, completing schematic designs and completing site selection.

Envision Learning Partners (ELP)

Oakland | 2018-2020

PRODUCT: *Training, tools, and technology to transform schools, increasing student college and career readiness*

ANNUAL BUDGET: \$3M **STAFF:** 12

Director of Business Development

Grow this highly respected educational consulting service, launched out of Envision Schools in Oakland, nationwide. 99% High School Grads Accepted to College | 90% First Year College Persistence | 72% First Generation go to College

- Collaborated on the effort to prepare for and grow ELP's services and national reach.
- Established Salesforce as the central tool for tracking sales pipeline, projecting revenue and measuring quality of service.
- Formulated and executed six-month study to understand resistance of school districts to Performance Assessment Systems, ELPs primary service. Study outcomes are guiding ELPs communication strategy, establishing methods to engage a wider audience, and demonstrating ELP as a leader in the field.
- Marketing: Collaborated on relaunch of ELP Newsletter, increasing reach 28% in first year; relaunched social media channels with newly developed communication strategies.
- Co-led ELP's Equity Initiative: inaugural Nexus Fellow (established by The Equity Lab in 2019); Co-led development of equity stance, guiding internal and external processes and goals.

Last Mile Robotics

Menlo Park | 2017-2019

PRODUCT: *Low-profile, self-balancing, autonomous 2-wheel delivery robots ("Twillbots")*

ANNUAL BUDGET / STAFF: *Stealth Startup*

Strategic Adviser

Guide brilliant engineering team in producing robotics MVP, including creating product specs and development schedule, to win funding and deepen interest from Disney, Amazon, FedEx, and other global enterprises.

We Teach Science Foundation

Burlingame | 2008-2017

PRODUCT: *STEM Remote Tutoring & Mentoring (RTM) program powered by EdTech platform*

ANNUAL BUDGET: \$3.5M **STAFF:** 33

CEO & President | Founder

Built and scaled a well-funded, corporate-supported, in-school educational platform, yielding statistically significant increases in state test scores, GPA, college readiness, SAT scores, STEM career awareness, and student efficacy.

ORGANIZATIONAL LEADERSHIP

- Scaled organization to 24 FTEs running on \$2.4M budget, including directors of Pedagogy, Operations, Finance, and Development, plus a tier of regional managers, program coordinators and 400+ volunteers.
- Forged alliances with 100+ blue-chip corporations to source long-term mentors in STEM careers such as Engineering, Software, Gaming, GPU/CPU, Animation, Business Analytics, and Finance.
- Expanded BOD from 3 to 14 influential partners with industry connections. Established committees for Finance, Operations, Board Governance, and Fund Development.
- Assembled technology strategy committee of luminaries from AT&T, Google, Cisco, NVIDIA, and Polycom.

PRODUCT/PROGRAM DEVELOPMENT

- Designed 1-on-1, web-based learning model that leverages video, interactive whiteboard, and communication platform to connect 400+ STEM experts with 6th- to 12th-grade students of low SES backgrounds.
- Piloted program into Pacifica schools, later rolling out to 15 schools in 6 CA and TX school districts, to serve 350 students/week on a sustainable multimillion-dollar operating budget.
- Produced deep analytics to power investor talks, including Annual Efficacy Report aggregating districts' assessment scores and i-Ready test data, as well as WTS' own pre/post/control metrics and grant-funded longitudinal study on SAT impact (compared against traditional test-prep courses).
- Crafted B2B earned-revenue strategy to productize and sell turnkey RTM program to technology firms.

PARTNERSHIPS & INVESTOR RELATIONS

- Obtained game-changing grant from media-tech mogul immediately following pilot launch to expand into San Jose School District; retained this funding source for 7 years.
- Secured over \$1M (and long-term commitment) from a multinational telco giant to fund Texas launch, inspiring creation of "Pure RTM": 100% virtual/remote mentor-mentee engagement.
- Won highly competitive \$100,000 Google grant, increasing program visibility and ultimately onboarding 60+ Googlers as loyal mentors and contributors with WTS.
- Received \$1.5M from William T. Bowes Jr. Foundation to scale program by both geography and content.

Speck Design Consulting

Palo Alto | 2006-2007

PRODUCTS: *Medical devices, video conferencing tools, server chassis, and telco components***ANNUAL BUDGET:** \$5M **STAFF:** 25**Director of Engineering**

Led global engineering operations from initial proposal and PoC through final design and development for this thriving technology/industrial product design firm fulfilling design contracts for clients such as Cisco and PRESYM.

- Spearheaded technical proposals, including detailed software/hardware architectural design strategy, to entice and land key accounts valued from \$25,000 to \$500,000.
- Oversaw 12 core engineers working on 6-10 product development projects, maintaining >80% utilization rate of staff and contractors. Set up 24/7 design model across US and Shanghai offices.
- Engaged client-side CEOs, CTOs, and Engineering Directors to discuss strategy and troubleshoot issues.

Analytix Consulting

Burlingame | 2005

PRODUCTS: *Electrical/mechanical and biotechnology engineering products***ANNUAL BUDGET/STAFF:** *Independent consultant***R&D Director | Principal**

Led proposal development and design work for federal government contracts linked to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) R&D divisions.

RoboToolz

Mountain View | 1999-2007

PRODUCTS: *High-precision, low-cost laser-measurement tools for the construction industry***ANNUAL BUDGET:** \$20M **STAFF:** 100 (*Silicon Valley, Munich, Hong Kong*)**VP Research & Engineering (2004-2005)**

Helmed engineering think tank behind a disruptive laser-measurement tool that undercut competitors by as much as 10X due to innovative technologies design/manufactured in Germany, US, and China.

- Served on executive team to co-define business strategy, risk mitigation strategy, global sourcing methods, and growth plan, including spinoffs/divestitures.
- Managed P&L (\$1M operating budget) for RoboTape laser-based range-finding system, in addition to overseeing global IP for all R&D projects in collaboration with attorneys in the US and Europe.
- Supervised 4-person engineering team as well as rapid-response QA team based out of China and the US.

Director, Research & Development (2003-2004)

Led Engineering and directed offshore Production and QA in China, including training technical staff to provide the highest level of support in resolving production issues at the Hong Kong manufacturing facility.

- Increased first-pass yield from 75% to 95% after implementing new workflows, systems, and technologies.
- Ramped up global development and production of electronic level sensors used in several of Toolz auto-leveling products; directed engineers in China, Europe and California.

Senior Engineer, Research & Development (1999-2003)

Drove end-to-end R&D, including rapid prototyping and technical troubleshooting to deliver low-cost product lines.

Board Member

BOYS AND GIRLS CLUB (DIRECTOR)

Pacifica | 2022-Present

Inspire and enable young people to realize their full potential and contribute to their communities

PROJECT INVENT (FOUNDING PRESIDENT, FOUNDING DIRECTOR)

East Palo Alto | 2019-2025

Empower students with the 21st Century skills to succeed individually and impact globally through invention

CURIODYSSEY (CHAIR, DEVELOPMENT COMMITTEE)

San Mateo | 2019-2020

Helping children acquire the tools to deeply understand our changing world

WE TEACH SCIENCE (FOUNDER & PRESIDENT)

Burlingame | 2008-2017

Motivate, inspire and mentor K-12 public school students to achieve excellence in the disciplines of math and science

Education

STANFORD UNIVERSITY (PALO ALTO, CA): MS Aeronautics & Astronautics**UNIVERSITY OF SOUTHERN CALIFORNIA (LOS ANGELES, CA):** BS Aerospace Engineering – Cum Laude
