STEPHEN HUBER

STEM Education Leader | Director of Innovation | Program Architect

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PROFESSIONAL SUMMARY

Visionary STEM education leader with over 10 years of experience designing and directing innovative programs that connect K–12 students with cutting-edge science and engineering. Proven track record of building "Extreme STEM" platforms—from student-led experiments aboard the International Space Station to deep-ocean research deployments and award-winning robotics competitions. Adept at forging partnerships with aerospace, oceanographic, and technology organizations to create sustainable, scalable programs that inspire the next generation of innovators. Recognized with the Shell Ocean Discovery XPRIZE $1M NOAA Bonus Prize and holder of a patent for space-based experimental platforms.

CORE COMPETENCIES

- STEM Curriculum & Program Design
- Strategic Partnerships & Grants
- Cross-Functional Team Leadership
- Engineering & Prototyping
- Robotics & Aerospace Systems
- Budget & Operations Management
- Stakeholder Engagement
- Project & Program Management
- International Operations

KEY ACHIEVEMENTS

- Won the Shell Ocean Discovery XPRIZE $1M NOAA Bonus Prize leading a student competition team against international professional teams.
- Holds a patent for a configurable platform enabling K–12 students to conduct science experiments aboard the International Space Station.
- Pioneered deep-ocean STEM platform deployed on the Monterey Bay Aquarium Research Institute's cabled observatory off the coast of Monterey, CA.
- Built and scaled "Extreme STEM" programs across space, ocean, and advanced robotics disciplines, creating sustainable revenue models for school-based innovation labs.

PROFESSIONAL EXPERIENCE

Director of Innovation – Research & Development July 2023 – Present

Valley Christian Schools | San Jose, CA

- Lead the strategic vision and execution of all innovation and R&D programs across the school system, overseeing space, ocean, and robotics STEM platforms.
- Direct multi-disciplinary engineering teams comprising students, faculty, and industry professionals in developing next-generation educational technology.
- Cultivate partnerships with NASA, MBARI, and leading technology companies to provide students with authentic research experiences.
- Manage program budgets, timelines, and deliverables while ensuring alignment with institutional goals and accreditation standards.

Director of Operations, Research & Development July 2019 – July 2023

Valley Christian School | San Jose, CA

- Created and expanded "Extreme STEM" programs giving K–12 students unprecedented access to space experiments and ocean-floor research.
- Led engineering teams that competed in multi-million-dollar international STEM competitions, earning top honors.
- Developed sustainable business models ensuring long-term program viability and scalability across multiple school sites.

Associate Director of Research & Development July 2018 – July 2019

Valley Christian School | San Jose, CA

- Supported the launch and growth of innovation programs bridging classroom learning with real-world engineering challenges.
- Coordinated with external partners in aerospace and ocean science to design student-accessible experiment platforms.

Program Manager / Lead Engineer October 2016 – Present

The Quest Institute | San Jose, CA

- Manage engineering teams delivering three concurrent programs: ISS experiment platform, Shell Ocean Discovery XPRIZE competition, and MBARI deep-ocean deployment.
- Architect the flagship hardware platform that enables students to design and run science experiments aboard the International Space Station.
- Collaborate with engineers from the aerospace, oceanographic, and technology sectors to maintain the highest standards of design and safety.

Founder July 2014 – December 2018

UpPump Inc. | San Jose, CA

- Founded a social enterprise developing IoT remote monitoring technology for hand-pump water wells in developing countries.
- Designed a predictive maintenance system to ensure uninterrupted clean water access for underserved communities worldwide.

Country Director, South Sudan October 2012 – August 2014

Radler Foundation | Juba, South Sudan

- Managed all water, medical, and leadership development programs across East Africa in an active conflict zone.
- Built strategic partnerships with NGOs, donors, and government leaders to expand organizational capacity and impact.
- Directed financial planning, procurement, and IT infrastructure across multiple remote field offices.

Operations Manager November 2010 – October 2012

Radler Foundation | Juba, South Sudan

- Led project planning, construction, and logistics for the organization's primary base of operations in Juba.
- Designed and installed the largest solar power system in South Sudan at the time, demonstrating commitment to sustainable infrastructure.
- Successfully registered the organization as an NGO with the South Sudanese government.

Project Manager May 2008 – November 2011

Radler Foundation | South Sudan

- Served as the first expatriate to establish clean water drilling operations, overseeing all aspects from equipment procurement to community engagement.
- Developed foundational operational processes, budgets, and partner relationships that enabled the organization's growth in the region.

EDUCATION

Bachelor of Science, Business Administration & Management 2004 – 2007

LeTourneau University

Mechanical Engineering Studies 2002 – 2004

California State Polytechnic University, Pomona

AWARDS & PATENTS

- Winner – Shell Ocean Discovery XPRIZE $1M NOAA Bonus Prize
- Patent: Configurable Platform for Conducting Experiments in Space

CERTIFICATIONS

- GIS on the Web