

Richard W. DeVaul, Ph.D.



Mad scientist, moonshot launcher, founder, with decades of hands-on engineering, operational, and executive experience. Started and led projects that created billions of dollars of enterprise value at X, formerly Google [x], and in the venture-backed startup world. Excellent communications skills, strong applied physics and math background. Inventor with over 70 issued US patents, multiple peer-reviewed publications. M.S. and Ph.D. graduate of MIT Media Lab.

Employment



CEO and Co-founder, **XNET**

Company Name: XNET

Dates Employed: Jan 2022 – Present

CEO, lead technical architect, lead blockchain engineer, and full-stack engineer for [XNET](#), the world's first true mobile 4G/5G network powered by blockchain. XNET is building high-quality LTE/4G/5G footprint for tier-one mobile operators. XNET has market traction and is actively negotiating with multiple Fortune 100 partners.

Core contributions include developing tokenomics and incentives, creating and maintaining the network visualizer, launching and verifying smart contracts on the Polygon main net, developing Discord bots to assist engineers and community members in network management, and critical communications tasks, including writing white papers and leading AMA discussions and podcast appearances.



CTO, Prometheus Fuels

Company Name: Prometheus Fuels

Dates Employed: Jan 2019 — Jan 2020

Employment Duration: 1 year

Assisted Rob McGinnis, Prometheus founder, in the launch and financing of Prometheus Fuels, a fuel-from-air electrofuels company. Assisted in closing \$11M+ in financing and functional demonstrations of the first fuel forge. Worked with California regulators to secure a preliminary classification of synthetic Prometheus gasoline as CARB gasoline. Provided mechanical engineering, electrical engineering, and experimental design services, as well as overseeing operations at the Santa Cruz facility. Developed open-source procedural CAD system, [yapCAD](#), to support the parametric design of the Prometheus fuel forge stack.



Founder, HyperSolve Consulting

Company Name: HyperSolve Consulting

Dates Employed: Nov 2018 – Present

Location: San Francisco Bay Area

HyperSolve offers innovation leadership consulting and consulting CXO services to startups and Fortune 100 companies. HyperSolve has also connected founders, investors, and other innovation leaders with in-person and online gatherings.



Director of Engineering, Google/Alphabet/X, the Moonshot Factory

Company Name: Google/Alphabet

Dates Employed: Jun 2011 – Oct 2018

Employment Duration: 7 yrs 5 mos

Lead early-stage innovation efforts at Google [X], now X, the Moonshot Factory. Assisted in technical diligence on Alphabet acquisitions. Made significant contributions to the early development of numerous successful X projects, including Wing, Malta, Tidal, and Dandelion, among others. Developed a rich IP portfolio for Alphabet, and is listed as an inventor on over 70 Alphabet-assigned US patents. Made significant contributions to X innovation culture and fail-fast methodology, and mentored other successful leaders at X. Assisted “Captain of Moonshots” Astro Teller in resource allocation decisions and supported internal and external-facing culture and communication efforts.



Title: Rapid Evaluation Team Lead

Dates Employed: Jul 2013 – Dec 2017

Employment Duration: 4 yrs 6 mos

Location: Mountain View, CA

Lead Rapid Evaluation team, special projects team that generates, evaluates, prototypes, and tests potential moonshots. Responsible for promoting fail-fast culture inside Google [x] and developing new Google [x] projects, including launch of Project Loon.

Title: Director of Rapid Evaluation and Mad Science

Dates Employed: Jun 2011 – Oct 2018

Employment Duration: 7 yrs 5 mos

Location: Mountain View, CA



Senior Prototype Scientist, Apple

Company Name: Apple

Dates Employed: Jan 2010 – Jun 2011

Employment Duration: 1 yr 6 mos

Investigation and rapid prototyping of new technologies and features across Apple's product line, focusing on applied physics and electrical engineering. Worked closely with the Apple design studio as well as advanced engineering teams.

Education



Ph.D., Massachusetts Institute of Technology

Degree Awarded: Doctor of Philosophy (Ph.D.)

Field Of Study: Media Arts & Sciences

Dates attended: 1999 – 2004

Activities and Societies: Student leader and organizer of the MIThril wearable computing project.

Worked with Professor Alex "Sandy" Pentland as part of the Human Dynamics group at the MIT Media Lab. Ph.D. dissertation on "The Memory Glasses" real-time wearable memory support system.

M.S., Massachusetts Institute of Technology

Degree Awarded: Master of Science (M.S.)

Field Of Study: Media Arts & Sciences

Dates attended: 1997 – 1999

Worked with Professor John Maeda as part of the Aesthetics and Computation Group at the MIT Media Lab, developed "Sol," a novel programming language for computational graphic design.



Texas A&M University

Field Of Study: Visualization Science

Dates attended: 1994 – 1997

Worked with Professor Donald House of the Visualization Science Program in the College of Architecture. Completed most requirements for M.S. in Visualization science, but left for MIT

before degree was granted. Wrote and defended a thesis on a novel dynamics constraints approximation algorithm for computer animation applications.

B.E.D, Texas A&M University

Degree Awarded: Baccalaureate of Environmental Design (B.E.D.)

Fields Of Study: Architecture, Anthropology, Physics

Dates attended: 1989 – 1994

Activities and Societies: Tau Sigma Delta, the architecture honor society

Selected Publications

DeVaul, Richard, et al. "Method and system for proactive telemonitor with real-time activity and physiology classification and diary feature." U.S. Patent Application No. 11/520,419.

DeVaul, Richard W., and Steve Dunn. "Real-time motion classification for wearable computing applications." 2001 Project Paper (2001).

DeVaul, Richard, et al. "Method and system for fall detection and motion analysis." U.S. Patent Application No. 11/372,843.

DeVaul, Richard Wayne, et al. "Balloon network with free-space optical communication between super-node balloons and RF communication between super-node and sub-node balloons." U.S. Patent No. 8,718,477. 6 May 2014.

de Lannoy, Charles-Francois, et al. "Indirect ocean capture of atmospheric CO₂: Part I. Prototype of a negative emissions technology." International journal of greenhouse gas control 70 (2018): 243-253.

Eisaman, Matthew D., et al. "Indirect ocean capture of atmospheric CO₂: Part II. Understanding the cost of negative emissions." International journal of greenhouse gas control 70 (2018): 254-261.

Lukowicz, Paul, et al. "The weararm modular, low-power computing core." IEEE micro 21.3 (2001): 16-28.

House, Donald H., Richard W. DeVaul, and David E. Breen. "Towards simulating cloth dynamics using interacting particles." International Journal of Clothing Science and Technology 8.3 (1996): 75-94.