

Summary

Product design consultant with over 20 years of industry experience in developing consumer, medical, and industrial products for a diverse range of clients.

Work Experience

2019 - 2020

JUMP Bikes | Senior Hardware Engineer | San Francisco, CA

Fueled by my passion for bicycles, I led the mechanical development of a next-generation dockless e-bike for UBER's New Mobility division. Responsible for taking vehicle component designs from concept through production. Established company best practices and mentored junior engineers in DFM, tolerance analysis, and GD&T.

2017 - 2018

Roastery Corporation | Head of Mechanical Engineering | San Francisco, CA

Directed an in-house mechanical engineering team to develop a novel ventless, automatic coffee roaster for commercial applications. Shaped product requirements for the roaster, laid foundations for CAD and documentation practices, created the mechanical design for the first integrated demo unit, hired and trained a mechanical engineering team to co-develop the subsequent EVT prototype.

2006 - 2017

DK Studio | Principal | San Francisco, CA

Established an independent design studio to provide expert product development and management consulting for a range of clients, from startups to Fortune 500 companies, including: Intel, NIO, Juicero, GoPro, RED Digital Cinema, Belkin, Philips Medical, Genentech, Varian, Sprint, Karmic Bikes, and Serfas Cycling. Developed a reputation for excellence in program management, technical leadership, and creative problem solving.

1998 - 2005

Lunar Design Inc | Mechanical Engineer and Project Manager | San Francisco, CA

Directed a team of 10+ engineers to develop and refine a next generation suite of robotic radiosurgery equipment for cancer treatment. Primary responsibilities included: client interface, program planning and design supervision for multiple subsystems, management of local and remote design resources, mentoring junior staff.

Developed a wide variety of products from concept through manufacturing for client companies including: Seagate, SanDisk, Electrolux, TheraSense, Cutera, and Farallon Medical. Responsibilities included: project planning, product design, lab research, prototyping, technical direction, manufacturing liaison, and team management.

1996 - 1997

Applied Materials Inc | Mechanical Engineer | Santa Clara, CA

Responsible for design, engineering, and manufacturing liaison for several mechanical modules in a state-of-the-art semiconductor manufacturing system. Gained considerable experience in machine design, fluid delivery, optical sensor, and motor control systems. Created patented design concepts for future platforms.

1995 - 1996

Johnson Controls Inc | Design Engineer | Holland, MI

Acted as liaison between industrial design and engineering at a premier automotive interior trim supplier. Design highlights: development of a novel locking track mechanism for automotive seating and storage applications; mechanical design for the 1998 Lincoln Continental floor console.

1993 - 1994

Cummins Engine Company | Assistant Engineer | Jamestown, NY

Design highlights: development of an automated compressor intake air system for engine test cells; Programmable Logic Controller (PLC) optimization for an automated machine line; development of a computer simulation to effectively manage tooling inventories.

Education

1997 - 1998

Stanford University | Master of Science in Mechanical Engineering | Stanford, CA

Focus in embedded systems design and mechatronics.

1991 - 1995

Cornell University | Bachelor of Science in Mechanical Engineering | Ithaca, NY

Focus in automotive and robotic design.

Additional Information

Patents

Inventor in several US utility patents, including:

“Vibration damping gimbal sleeve for an aerial vehicle” (patent no. 10,150,576)

“Portable memory storage device with biometric identification security”
(patent no. 8,000,502)

“Automatic biological analyte testing meter with integrated lancing device
and methods of use” (patent no. 7,572,237)

“Combined slurry dispenser and rinse arm and method of operation”
(patents no. 6,280,299 and 6,139,406)

“Method and apparatus for automatically changing a polishing pad
in a chemical mechanical polishing system” (patent no. 6,379,221)

Software

NX | SolidWorks | Pro/E Creo | MS Office suite | Adobe Illustrator and Photoshop

Creative Pursuits

Artist | Musician | Cyclist | Yogi | Conversational French | World traveler