

OBJECTIVE

I am interested in combining my skills in data science, business, and engineering to build new products and businesses. Through a research-oriented mindset and hypothesis-driven approach, I have acquired extensive experience solving ambiguous problems. My diverse background in innovation strategy, R&D management, mechanical engineering, and industrial manufacturing enables me to understand complex problems and identify creative solutions. I specialize in building and executing R&D strategies under circumstances of high technical and market uncertainty.

EDUCATION

Massachusetts Institute of Technology

SM Mechanical Engineering, January 2014 - Major GPA: 5.0/5.0

Relevant coursework: Sustainable manufacturing, computer science and eng., innovation strategy, entrepreneurship.

Master's Thesis, 2012-2014 - MIT Presidential Fellow

Strategic and Financial Implications of Unmanned Underwater Vehicles and Long-term Underwater Power Sources.

SB Mechanical Engineering, June 2012 - GPA: 5.0/5.0

Relevant coursework: Manufacturing, systems engineering, product design & dev, robotics & controls, programming.

Research projects: Bio-mimetic underwater robotics, networked indoor robot navigation, firearms identification for Boston Police, compact fusion power for spacecraft

EXPERIENCE

Innovation Consultant, Innosight 2014-2015

Assisting Fortune 500 companies to respond to disruptive innovation as an innovation consultant.

- **Biotech computing:** Managed the design of a cloud-based computational platform for biotech R&D
- **Pharmaceutical R&D:** Created new R&D accelerator and launched its first project at a major pharma.
- **Energy & Water:** Launched strategic initiative in water at an electric utility in California.
- **Consumer Electronics:** Devised R&D strategy for a new product line being launched by a consumer company.
- **Semiconductor Manufacturing:** Advised assessment and expansion of capabilities at an electronics company.
- **Internet of things:** Facilitated a symposium examining opportunities and challenges in the Industrial Internet

Unmanned Underwater Vehicle (UUV) Projects with Lincoln Laboratory, MIT 2011-2014

Managed research team members, experimental research, accounting (\$300k budget), procurement, and technical documentation & communication for prototype long-term underwater power sources. Founded a startup, competed in the MIT 100K, acted as CFO & COO.

Boeing Company, Summer 2012

Manufacturing and Robotics Engineering Intern

Contributed to the development of a revolutionary manufacturing line to improve aircraft quality & takt time, building & presenting critical industrial robotic vision & manipulation systems to upper management.

Schlumberger Limited, Summer 2011

Manufacturing Engineering Intern

Led a team to design, build, and implement apparatus for testing electrical components for oil service equipment.

SKILLS

Technical: Systems engineering; manufacturing; data mining and analysis; Python (pandas, Numpy, SciPy), Java & Matlab; SolidWorks; product design and development; electronics.

Business: Team & project management; strategy & business development; disruptive innovation; entrepreneurship & startups; communication, presentations & writing.