ASHLEY WHITNEY

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EDUCATION

Massachusetts Institute of Technology Cambridge, MA
School of Engineering & Sloan School of Management 9/2015 – 6/2017 (anticipated)
M.S., System Design and Management

University of Illinois Urbana-Champaign, IL
School of Engineering 9/2004-5/2009
B.S., Mechanical Engineering (with honors)

EXPERIENCE

Cambridge Consultants Boston, MA
Cambridge Consultants is a global product development and technology consultancy providing outsourced research and development services to start-ups and blue-chip companies.

Principal Mechanical Engineer – Medical Technologies ***1/2016 – 9/2016***

- Led technical design efforts in development of a portable, reliable, low-cost laparoscopic surgical platform prototype targeted to address unique needs of surgery in emerging markets.
- Managed program to explore feasibility of integrating energy harvesting technology into a drug delivery device for dose compliance tracking.
- Actively contributed to helping build the company's drug delivery service offering in the US office through recruitment, employee mentoring, and demonstrated thought leadership.
- Designed and implemented design verification training curriculum within organization.

Senior Mechanical Engineer – Medical Technologies ***1/2012 – 1/2016***

- Managed program to support first combination product launch for pharmaceutical company.
- Led mechanical engineering efforts on a multi-disciplinary team redesigning a complex fluidic management system used in surgical procedures from concept generation to product launch.
- Led mechanical engineering efforts on a multi-disciplinary team to design a home healthcare monitor device currently on the market in the US.

Baxter Healthcare Round Lake, IL
Baxter Healthcare is a globally diversified healthcare company providing products and expertise in medical devices, pharmaceuticals, and biotechnologies that save and sustain lives.

Senior Mechanical Engineer – Electromechanical Devices ***7/2011-1/2012***

- Created a simulation model to quantify the effects of critical environmental and usage factors on infusion pump flow rate accuracy. Earned DFSS green belt certification in conjunction with project.
- Supported requirement generation and concept generation activities for a next generation infusion pump.

Mechanical Engineer - Engineering Development Program ***7/2009-7/2011***

- Developed and evaluated multiple iterations of prototypes for anesthetic container closure project.
- Led product verification efforts including test planning and management of test team for multiple products.
- Managed implementation of infusion pump rework related to remediation efforts, including component redesign, procedure creation, personnel training, and troubleshooting.

Ethicon Endo-Surgery Cincinnati, OH
Ethicon Endo-Surgery is a Johnson & Johnson family company that develops medical devices for minimally invasive and open surgical procedures.

Research & Development Co-op ***8/2006-6/2008***

- Managed concept development and selection process for key component of medical device prototype.
- Performed tolerance stack-up analysis on multiple surgical device components.
- Performed finite element analysis to optimize design of vibration simulation test fixture.

OTHER QUALIFICATIONS

Medical device regulations (ISO 13485), deign controls, requirement management, risk management, system architecture, system design, program management, program design, design for six sigma, mechanical design, CAD modeling (Solidworks), design for manufacture and assembly, tolerance analysis, statistical analysis (Minitab), test design, product verification, root cause analysis.