

# Will Bosworth

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## Objective

To develop and deploy robot technology for emerging markets such as harsh-environment exploration, medical intervention, manufacturing and leisure.

## Education

### **Massachusetts Institute of Technology**

Bachelor of Science in Mechanical Engineering, 2008

Master of Science in Mechanical Engineering, 2011

PhD in Mechanical Engineering, 2016 (expected)

*Major:* Design, modelling and control of electromechanical systems.

*Minor:* Industrial-scale energy systems.

## Experience

### **MIT Newman Lab for Biomechanics and Human Rehabilitation, 2011-Present**

**Research Assistant**, PhD thesis advisor: Prof. Neville Hogan

Built the *Super Mini Cheetah* robot, the first small, low-cost legged robot to run, jump and turn.

Contributed to the DARPA M3 funded *MIT Cheetah* robot, an efficient and dynamic quadrupedal robot.

Advised six undergraduate research projects and two undergraduate theses.

### **MIT Laboratory for Electromagnetic & Electronic Systems, with Schlumberger SDR, 2009-2011**

**Research Assistant**, MS thesis advisor: Prof. Jeff Lang

Developed a novel electromagnetic actuator for high-power wellbore manipulation.

Built and experimentally validated a simulation of the actuator for open-ended application search.

Described the requirements and unique capability of electromagnetic tools in downhole environments.

### **Seegrid Corporation - Industrial Mobile Robots, 2008-2009**

**Mechanical Engineer**

Developed manufacturing plans for the company's first production mobile robot.

Invented and patented a multi-plane LIDAR safety system to increase reliability and throughput.

Invented a field-deployable calibration tool and process to increase driving accuracy.

Led meetings on the company's largest consulting contract with a multinational technology firm.

### **Nub Labs, 2008-2009**

**Co-founder**

Founded and operated a three person engineering R&D consulting partnership.

Managed a six person, month-long contract with a utility scale solar power company.

Created and produced a wireless robot and sensor kit used in Boston area science classrooms.

Operated Nub-Talks, a lecture series featuring local scientists, politicians and entrepreneurs.

### **MIT Precision Engineering Group, 2007-2008**

**Undergraduate Researcher**, BS thesis advisor: Prof. Alex Slocum

Designed and characterized high-stiffness interfaces for next-generation silicon wafer processing.

Experimentally characterized self-compensating and actively controlled hydrostatic bearings.

Invented a noninvasive surgical tool, published in ASME Journal of Medical Devices.

### **The MIT Campus Tourbot, 2006-2008**

**Hardware Leader, Co-founder**

Conceptualized, fundraised and built a human-sized robot to give tours of the MIT campus.

The robot, *Alan Turing*, gave tours at the MIT Museum in Fall 2007 and Spring 2008.