

**Thomas (“TJ”) Burns**  
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## EDUCATION

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**Massachusetts Institute of Technology** - Cambridge, MA June 2017

***Candidate for B.S. in Mechanical Engineering GPA: 4.5/5.0***

- Minor in Brain & Cognitive Sciences
- Relevant Completed Coursework: Numerical Computation for Mechanical Engineers (MATLAB), Dynamics, Mechanics I, Materials, Differential Equations, Intro to Design
- Spring Semester Relevant Projected Coursework: Intro to Computer Science (Python), Systems & Controls, Design & Manufacturing, Fluid Dynamics, Electronics for Mechanical Systems

**Mount Sinai High School – Mt. Sinai, NY** June 2013

*GPA: 98.6/100, SAT Math: 770, ACT 33*

- Superintendents List, National Honor Society, AP Scholar with Distinction

## EXPERIENCE

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**Institute for Soldier Nanotechnologies** - Cambridge, MA

***Undergraduate Researcher, Elman Group*** Jan 2015-Present

- Project Title: Functional Micro Dispensers.
- Objective is to design, assemble, and test 3D printed cartridges used by soldiers to repel disease-carrying insects.
- Analyze data and find optimal release rate of chemicals.

**American Environments Company, Inc.** - Medford, NY

***Intern*** June 2014 – Aug 2014

- Designed set-ups to test aircraft engine parts under various conditions.
- Built & tested Fire, Water, Sand, Shock, Hydraulics, Impulse, Hot Air and Endurance set-ups.

**National Computerized Agencies, Inc.** - Coram, NY

***Asst. Bookkeeper*** (summers) May 2010 – Sep 2013

- Responsible for entering and organizing client and accounting data.

## LEADERSHIP & ACTIVITIES

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**MIT Varsity Football Team** - Cambridge, MA September 2013 – May 2014

**MIT Varsity Lacrosse Team** - Cambridge, MA September 2013 – Present

**Mount Sinai Varsity Lacrosse: Team Captain** - Mt. Sinai, NY March 2012 – June 2013

**Mount Sinai Varsity Football: Team Captain** Mt. Sinai, NY Sep 2010 – June 2013

## Skills & Interests

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- Computer: Proficient: MATLAB, Microsoft Office, Solidworks. Familiar: Java, C++, Python, AutoCAD
- Machine Shop: Band Saw, Lathe, Mill, (MIG) Welding, Grind Wheel, Steel Piping, 3D Printing
- Interests: Football, Lacrosse, Snowboarding, Surfing, Reading