

THOMAS NEEDHAM

East Campus Dormitory, MIT | tneedham@mit.edu | 419.708.1563 (cell)

OBJECTIVE | To gain experience in a practical engineering field through working with a team developing real-world technologies.

SKILLS & ABILITIES | Outside of technical classes, most time is spent in various labs around campus developing a tangible intuition for systems and assemblies, from purely mechanical devices such as lofts for my room, up to mechatronic projects involving power electronics, GUI coding, PCB layout, and precision machining. These projects are the culmination of my hobby, which has always been challenging myself with more complex designs. A cumulative portfolio of these projects is easily available on request (PDF/physical), and online:
<http://tneedham.github.io/Portfolio/>

EXPERIENCE | **MIT RESEARCH INTERNSHIP (UROP)**
FALL 2014, WINTER/SPRING 2015 (CURRENT) 4-6HRS/WK
Assembled, iterated, and prototyped circuit designs for novel wireless charging research

MIT RESEARCH INTERNSHIP (UROP)
SUMMER/FALL 2014, WINTER/SPRING 2015 (CURRENT) 40HRS/WK SUMMER, 6-8 IN TERM
Managed, ran, improved, and repaired a diesel engine used to reform methane to syngas

CAMP TECUMSEH YMCA
SUMMER 2012, 60 HRS/WK
Worked as summer camp counselor for children ages 8-12.

EDUCATION | **MIT, CAMBRIDGE, MA**
WORKING TOWARDS BA IN MECHANICAL ENGINEERING, EMPHASIS ON MECHATRONICS

NORTHVIEW HIGH SCHOOL, SYLVANIA, OH
HONORS DIPLOMA
Graduated 5th in class with a 4.43 (AP weighting) GPA, ACT score of 35, and 2 year captain of the school's Science Olympiad team.

SCHEDULE | June-August of 2015 is largely open, with only a wedding to attend at the start of the term

INTERESTS | 'Mechatronic' systems combine the complexity of engineering with the practical objectives that interest me. Combining diverse fields, such as mechanical, electrical, and electronic systems in real scenarios serves to show the importance of a holistic education. Having such a broad scope of engineering has always been a goal.

REFERENCES | **LIXIN SHI, DOCTORAL CANDIDATE**
MIT
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617.842.6856

EMMANUEL LIM, 2ND YEAR GRADUATE STUDENT
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