

253 Commonwealth Ave
Boston, MA 02116
773-469-1911
EDUCATION

Elise Newman
esnewman@mit.edu
Date of birth: 20/02/1994

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Candidate for Bachelor of Science in Physics

June 2016

Candidate for Bachelor of Science in Linguistics

GPA: 4.6/5.0

- Relevant coursework (physics): Classical Mechanics I, II, and III, Electricity and Magnetism, Relativity I, Quantum Mechanics I, II, & III, Statistical Mechanics/Thermal Physics, Junior Lab, Graduate Astrophysics I
- Relevant coursework (linguistics): Intro, Syntax I, Phonology I, Semantics I, Advanced Syntax, Graduate Syntax, Field Methods, Phonetics, Philosophy of Mind

RELEVANT EXPERIENCE

MIT Laboratory for Nuclear Science, Professor Joseph Formaggio

Cambridge, MA

Research Assistant

September 2013 – May 2016

- Use a dedicated neutron source to calibrate Helium-3 detectors for neutrino research
- Take and analyze data to characterize the neutron flux incident on the detector in order to filter out neutron measurements that interfere with neutrino measurements
- Conduct measurements at the MIT Research Reactor to analyze detector response to the reactor when it powers on

Institut für Raumfahrtssysteme – Uni Stuttgart

Stuttgart, DE

Research Intern

June 2013 – August 2013

- Developed an XML interface for Blender (simulation software)
- Designed this program to make the import, modification, and export of XML – encoded spacecraft designs possible and efficient for Blender

MIT Marine Robotics Team

Cambridge, MA

Team Member

September 2012 – 2014

- Team goal: to build an autonomous underwater vehicle for the purpose of ocean exploration
- Designed the pressure vessel and sensor affixations

Independent Study, Professor David Pesetsky

Cambridge, MA

Student

February 2014 – present

- Studied the properties of tense and its interaction with negation in English
- Presented at two undergraduate colloquium conferences (Cornell and Harvard University) in Spring 2015

Astronomisches Rechen-Institut – Uni Heidelberg

Heidelberg, DE

Research Intern

May 2015 – August 2015

- Developed python scripts for the purpose of astronomical image calibration
- Calibrated the background brightness for two galactic images

TEACHING EXPERIENCE

MIT Department of Physics

Cambridge, MA

Teaching Assistant

Spring 2014, Fall 2014, Fall 2015, Spring 2016

- Classical Mechanics I & Electricity and Magnetism I: responsibilities include grading and guided problem solving sessions with students
- Physics Junior Lab: responsibilities include in-class guidance on experimentation techniques and data analysis

MIT Educational Studies Program

Cambridge, MA

Teacher

Fall 2013

- Taught and designed teaching materials for 2 single session introductory linguistics classes for Boston area high school students for MIT's Splash program
- Also co-taught a single session introductory mechanical engineering class for the Splash program

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LEADERSHIP

MIT Muses A Cappella Group

Cambridge, MA

Music Director '15, Assistant Music Director '14, Business Manager '13

September 2014 – May 2016

- Currently leading rehearsals and planning concerts
- As business manager, coordinated gigs and registered events

ADDITIONAL EXPERIENCE

Rotary International

Alzenau, DE

Exchange Intern

September 2011 – August 2012

- Attended the Spessart Gymnasium in Alzenau and lived with a German host family for one year
- Attended monthly Rotary meetings

SKILLS

Languages: German (advanced), Spanish (intermediate)

Computer/Programming: Python, MATLAB, Mathematica, C, Mac OS X, Windows