Jonah Majumder

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EDUCATION

Yale University (GPA 3.90 / 4.0)

Undergraduate (Graduated May 2017)

• B.S. in Physics (with distinction)

PhysicsIntroductory Mechanics,

Thermodynamics, E&M (with lab)

Advanced Electricity & Magnetism

Advanced Classical Mechanics

Statistical Mechanics &

Quantum Mechanics I & II

Physics of Renewable Energy

Thermodynamics

- B.S. in Economics
- Awarded magna cum laude

Post-Graduate (Combined GPA 4.0 / 4.0)

(Summer 2017 - Fall 2018)

- Organic Chemistry I & II (Yale Summer Session)
- Introductory Biology I & II (Harvard Extension School)
- Biochemistry (Northeastern College of Professional Studies)

MATH/SCIENCE COURSEWORK

Chemistry/Biology

- Introductory General Chemistry
- Introductory Organic Chemistry
- Introduction to Molecular & Cellular Biology
- Introduction to Evolutionary & Organismic Biology
- Biochemistry

Math/Stats

- Multivariable Calculus
- Linear Algebra
- Probability and Statistical Theory
- Machine Learning/Data Analysis Methods
- (Applied) Differential Equations

Computer Skills: Python, Matlab, C/C++, Mathematica, LabVIEW, JavaScript/HTML/CSS

RESEARCH EXPERIENCE

MIT Lincoln Laboratory

Assistant Staff Scientist, Quantum Information & Integrated Nanosystems Group (89): Fall 2017 - present

- Worked on an experiment using a diamond-based magnetometer to detect magnetic signals from humans (magnetoencephalography and magnetocardiography)
- Major accomplishments:
 - Presented poster: High-Sensitivity Magnetometry with Nitrogen-Vacancy Centers for Biomagnetic Signal Detection at the Gordon Research Conference on "Quantum Control of Light and Matter" (August 2019)
 - Invited talk at MIT Industrial Liaison Program conference (November 2019)

Yale University

Undergraduate Physics Researcher, DeMille Group: Spring 2016 - Spring 2017

- Worked on Professor (Dave) DeMille's experiment to detect a nuclear Schiff dipole moment in Thallium Fluoride
- Received Yale College Dean's Fellowship for Research in the Sciences to support research (Summer 2016)

COMMUNITY INVOLVEMENT

Tufts Medical Center

Patient Visiting Volunteer: Summer 2018 - present

 Visited patients in overnight care units; provided general non-medical care including delivery of books/magazines and general conversation

Haven Free Clinic at Yale

Student Pharmacy Volunteer: Spring 2017

- Volunteered at a weekend medical clinic that provided free care to uninsured and undocumented patients
- Worked in the pharmacy division, trying to provide low-cost medication to patients

Yale Club Soccer

Captain: 2015 - 2017, Team Member: 2013 - 2017

As captain, responsible for scheduling/organizing games, practices, social events

Camp Kesem (Yale Chapter)

Counselor: Summer 2015 & Summer 2016, Member: Fall 2014 - Spring 2017

Volunteered at Camp Kesem, a student-run summer camp for kids whose parents have/had cancer

OTHER WORK EXPERIENCE

Yale University

Undergraduate Tutor and Grader: Spring 2014 - July 2017

• Graded and tutored for undergraduate courses in Physics, Math, Economics, and Computer Science

Overland Summers

Bike Trip Leader: Summer 2014, Summer 2015

Led bike tours for teenagers in New England and Nova Scotia; certified in Wilderness-First Aid, CPR/AED