

SURYABRATA DUTTA

suryadutta.me • suryabrata.dutta@yale.edu • (770) 329-4253

EDUCATION

Yale University

Currently Pursuing B.S. in Physics (*Intensive*) | GPA: 3.86

May 2018 (*Expected*)

New Haven, CT

Relevant Coursework: Intensive Introductory Physics, Modern Physics Lab,
Classical Mechanics, Physical Processes in Astronomy,
Gravity, Astrophysics, & Cosmology (*Advanced Elective Course*)

EXPERIENCE AND EXTRACURRICULAR ACTIVITIES

The McKinsey Research Group at Berkeley Lab - Visiting Student Researcher

May 2015 - Present

Project: *Monte Carlo Simulations for Dark Matter Particle Detection in Liquid Helium-4*

Berkeley, CA

- Under the mentorship of Dr. Scott Hertel and Dr. Daniel McKinsey
- Exploring the use of superfluid liquid helium-4 as a viable candidate for the detection of dark matter particles, specifically weakly interacting massive particles (WIMPS).
- Focus is on coding Monte Carlo simulations, using the Python language, to create optimality conditions for the detection of light WIMPS using energy kinematics and probabilistic functions.

Yale Undergraduate Research Association - Co-founder and Director of Programming

Jan 2015 - Present

New Haven, CT

- Co-founded undergraduate research community in collaboration with AURA (see above) to promote interdisciplinary communications, mentorships, and research opportunities at Yale.
- **Director of Programming:** Organize academic events, such as panels and workshops, and social events, such as mixers, to connect and exchange ideas within the research community.
- Hosted and planned the **2015 Yale Undergraduate Research Symposium**, the first undergraduate research conference at Yale showcasing nearly 60 interdisciplinary undergraduate projects
- Have grown our community to **1500 undergraduates in 5 months**, and still rapidly expanding

Association for Undergraduate Research Advancement - Co-founder and Outreach Director

Jan 2015 - Present

Cambridge, MA

- Co-founded national undergraduate research community, along with members from top research institutions, to promote interdisciplinary research communication and collaboration nationwide.
- Responsible for spreading resources and networking with other research institutions to promote effective mentorships as well as open research opportunities to undergraduates across the nation.

Yale Scientific Magazine Masthead - Writer and Layout Editor

Jan 2015 - Present

New Haven, CT

- Editor for Yale Scientific Magazine, the oldest collegiate scientific publication.
- Published two scientific articles this year on astronomy (evolution of galaxies outside the Milky Way) and technology (self-powered piezoelectric sensors).
- Assist with layout production, with expertise on graphic design and typography.

SKILLS

Python | Java | Drupal | HTML5 | CSS3 | JavaScript | jQuery Mobile | Adobe Creative Suite | Microsoft Office Suite

AWARDS

- **George J. Schulz Summer Fellowship in the Physical Sciences:** awarded by Silliman College for summer research
- **Yale University Likely Letter Recipient:** Top 150 out of 31,000 applicants to Yale University