

# SURYABRATA DUTTA

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## EDUCATION

### **Yale University**

Currently Pursuing B.S. in Physics (*Intensive*)

Relevant Coursework: Intensive Introductory Physics, Modern Physics Lab,  
Gravity, Astrophysics, & Cosmology (*Advanced Elective Course*)

May 2018 (*Expected*)  
New Haven, CT

### **Chattahoochee High School**

High School Diploma: *Summa Cum Laude*

SAT: 2400 Superscore | ACT: 36 Composite

May 2014  
Johns Creek, GA

## EXPERIENCE AND EXTRACURRICULAR ACTIVITIES

### **The McKinsey Research Group at Berkeley Lab - Visiting Student Researcher**

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

- 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.

May 2015 - Present  
Berkeley, CA

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

- 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.

Jan 2015 - Present  
Cambridge, MA

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

- 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.

Jan 2015 - Present  
New Haven, CT

### **Yale Scientific Magazine Masthead - Writer and Associate Layout Editor**

- 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.

Jan 2015 - Present  
New Haven, CT

## 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