

Ishaan D. Rao

STUDENT · UNIVERSITY OF PENNSYLVANIA

Philadelphia, PA

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Education

University of Pennsylvania

Philadelphia, PA

B.S.E. IN COMPUTER SCIENCE

Aug. 2017 - PRESENT

- Mathematical Foundations in Computer Science, Programming Languages and Techniques I, Calculus III, Principles of Physics I: Mechanics and Wave Motion

North Carolina School of Science and Mathematics

Durham, NC

HIGH SCHOOL

Aug. 2015 - May 2017

- Research in Computational Science, AP Chemistry, Computational Physics, Group Theory, Game Theory and Combinatorics, Graph Theory, Mathematical Modeling, Python, Java
- Co-authored R Programming Manual: *Case Studies in the R Programming Language*
- GPA: 5.663/5.0 (weighted)

William G. Enloe High School

Raleigh, NC

HIGH SCHOOL

Aug. 2013 - Jun. 2015

- Multivariable Calculus, Differential Equations, AP Calculus AB/BC, AP Environmental Science, Honors Chemistry, Honors Biology, AP Macroeconomics, AP World History
- GPA: 5.42/4.0 (weighted)

Experience

Shodor Education Foundation

Durham, NC

INTERN

Oct. 2013 - PRESENT

- Teach and assist in programming concepts, web design, forensics, and modeling workshops
- Develop STEM lesson plans for use in computational science workshops
- Mentor and guide middle school and high school students in the apprenticeship program.
- Create online JavaScript tutorial for use by educators and students in apprenticeship program

NCSSM Foundation

Durham, NC

INSTITUTIONAL ADVANCEMENT ATTACHÉ

Aug. 2016 - May 2017

- Acted as a student liaison between the student body, parents, alumni, and NCSSM Foundation
- Promoted the NCSSM brand among the alumni network and conduct fundraising campaigns among the student body

Duke University

Durham, NC

STUDENT RESEARCHER

Jun. 2016 - Sep. 2016

- Conducted computational environmental engineering research to address energy inefficiencies with battery-storage technology
- Developed a cost optimization model for large scale energy storage devices using R and the Shiny package
- Submitted research paper to Siemens and Regeneron research competitions

NCSSM Distance Education & Extended Programs

Durham, NC

STUDENT INSTRUCTOR

Aug. 2015 - May 2016

- Provided STEM enrichment to rural schools across NC through live videoconference
- Developed tutorials and lesson plans targeted toward elementary and middle school students

Skills

- Proficient in Python, Java, Mathematica, HTML/CSS, R, JavaScript, jQuery, and PHP
- Skilled at modeling and simulation programs such as Vensim, AgentSheets, NetLogo, Excel, and ParaView
- Proficient in Spanish: 6 years of instruction