

SRI DEVULAPALLI

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(832)-790-8011

EDUCATION

Yale University, B.S. Physics

(expected) 2020 - 2024

Carnegie Vanguard High School

2016 - 2020

- Weighted GPA: 4.89/4.0, Class Rank: Top 10%, SAT: 1550, ACT: 35, SAT Math II: 800, SAT Physics: 800, 10 AP Scores: Seven 5's Three 4's
- **Physics coursework:** AP Physics C: Mechanics and E&M (5/5), PhysicsWOOT 7-month physics Olympiad program, Personal self study: *Classical Mechanics* by Kleppner & Kolenkow, *Electricity and Magnetism* by Purcell & Morin, *Principles of Quantum Mechanics* by Shankar
- **Mathematics coursework:** AP Statistics and AP Calc BC (5/5), Post-Calculus (linear algebra, multivariable calculus, differential equations)

RESEARCH PUBLICATIONS AND PROJECTS

VLA Survey of OH masers in Star Forming Regions: Image broadening

V. Migenes, J. L. Verbena, V. I. Slysh, A. Ruiz-Velasco, I. E. Val'tts, A. V. Alakoz, S. Devulapalli (2019)

Paper submitted for publication to the flagship astronomy journal **Monthly Notices of the Royal Astronomical Society**

Color Photometry and Classification of Type Ia Supernova SN2019hez

S. Devulapalli, E. Humphries, I. Palk, D. Raskin (2019)

Supernova findings published to the **International Variable Star Index (VSX)** under the AAVSO

Aberrational Spin Geometries and Time Dilation of PSR J0737-3039

S. Devulapalli, D. Garrison (2018)

(Unpublished) Expository project. Wrote an n-body simulator in *Mathematica* to model the orbits of the binary pulsar system PSR J0737-3039 under a variable mass condition. I determined the time lag of each orbit to millisecond precision using 4 numerical integration methods. AP Research Score 5/5.

TECHNICAL SKILLS

**Programming and Modeling
Software & Tools**

Python (and Vpython), Mathematica
Linux, NRAO AIPS, Latex

SELECTED WORK EXPERIENCE

Research Internships:

Texas Southern University

Summer and Fall 2019

Radio Astronomy Researcher

Worked as sole highschooler on a team of Ph.D radio astronomers. Calibrated, mapped, and gaussian fit raw data directly from VLA telescopes using NRAO AIPS. Co-author on final research paper to be resubmitted for publication into the Royal Astronomical Society. Directed by Dr. Victor Migenes, Ph.D.

Yale University

Summer 2019

Yale Summer Program in Astrophysics (YSPA)

Spent 4 weeks at Yale, worked in a team to perform photometric analysis, and authored a paper on supernova SN2019hez. Data was taken using the 16inch RCOS telescope at Leitner Observatory. Findings published to the VSX. Presented research to Yale University Dept. of Astronomy. Directed by Dr. Michael Faison, Ph.D.

SELECTED ACADEMIC HONORS

USA International Astronomy Olympiad Team: Honorable Mention. Selected as one of 4 members to represent the US national team in Romania 2019

USA Astronomy and Astrophysics Olympiad National Finalist: placed among the top ~80 high school students in the US for camp selection 2020

USA National Physics Bowl Texas Champion: team winner, 2nd overall 2019

Denver Astronomical Society Van Nattan-Hansen Scholar: finalist 2020

Program in Mathematics for Young Scientists (PROMYS) Invitee: invited to the highly selective 6-week summer mathematics program 2019

Texas State High School Mathematics Contest (TMSCA): rank 4th in state of Texas 2017

PERSONAL INTERESTS

Reading *The Economist* and *Quanta Magazine*, Trail Biking, Tex-Mex, Kinetic Art