

TIMOTHY ARANT

Atlanta, GA • (912) 222-5512 • timothyarant@gmail.com • [linkedin.com/in/timothy-arant](https://www.linkedin.com/in/timothy-arant)

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, College of Sciences
Candidate for Bachelor of Science in Physics

Atlanta, Georgia
(Expected) May 2025

- Concentration: Astrophysics GPA: 3.54/4.00
- Minor: Russian
- Vice President of the Georgia Tech Astronomy Club
- Zell-Miller HOPE Scholarship Recipient
- Dean's List Student
- Relevant Coursework: Nuclear Astrophysics and Stellar Evolution, Classical Mechanics, Modern Physics, Object-Oriented Programming, Calculus (I, II, III, IV), Chemistry, Advanced Russian (I, II)

GLYNN ACADEMY
High School Diploma

Brunswick, Georgia
May 2021

- Summa cum laude graduate ranking in top 2% of class GPA: 4.48/4.00
- Governor's Honors Program Finalist in Computer Engineering (2020)
- Georgia Science Olympiad 2nd Place Winner in Protein Modeling (2021)
- AP Scholar with Distinction
- Senator of Glynn Academy Student Council
- Tutor volunteer
- Member of National Honor's Society, Beta Club, Environmental Science Club, Civic Engagement Club, Ethnology Club, and Future Business Leaders of America
- Competed in several tournaments with the Saint Simons Island Tennis Academy

EXPERIENCE

GEORGIA TECH ASTRONOMY CLUB *Vice President, Atlanta, GA April 2022 - Present*

- Expanded outreach and increased overall attendance with 100+ dues-paying members and 500+ general members
- Operated advanced telescopes for private and public use
- Organized events relating to astronomy in the Atlanta area, with attendance ranging from hundreds to thousands of people
- Prepared and delivered detailed presentations of astrophysical phenomena to hundreds of interested students
- Volunteered at elementary schools and museums to bring knowledge and equipment to families

PROJECTS

STELLAR MODELING *Atlanta, GA August 2022 – December 2022*

- Utilized StatStar source code to perform an inward integration of stellar structure equations and produced a simplified model of a zero-age main sequence (ZAMS) star consisting of its internal structure, nuclear energy production, stellar classification and evolution, and circumstellar habitable zone

STELLAR OBSERVATIONS *Atlanta, GA August 2022 – December 2022*

- Observed and collected data for several astronomical objects using a variety of Newtonian-Cassegrain telescopes
- Researched hexagonal phenomena exhibited by storms on Jupiter and Saturn's magnetic poles

SKILLS/INTERESTS

- Java, Python, and MATLAB programming experience
- Data Analysis experience
- Experience in astrophysics, classical physics, and chemistry labs
- Languages include English (Native), Russian (Advanced), and Spanish (Intermediate)
- Strong research skills
- Modeling and Simulation
- Excellent time management