

Chirag Gokani

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EDUCATION

- **University of Texas at Dallas** Class of 2021
B.S. Physics, Minor in Music GPA: 3.848
- **St. Mark's School of Texas** Class of 2017
High School Diploma GPA: 4.14

PHYSICS

- **University of Texas at Dallas: Physics Department**
Teaching Assistant January 2020 - present
 - Set up and led the undergraduate lab component for Electromagnetism & Waves (PHYS 2126)
 - Taught curriculum that builds up DC and elementary AC circuitry from first principles
 - One of three undergraduate students to hold a Teaching Assistantship in the department
- **Advanced Research in Thermo Fluid Systems Lab**
Research Assistant February - August 2019
 - Measured and catalogued fluid properties of hundreds of samples bovine and human milk
 - Developed models to describe how fat globules affect the velocity-dependent viscosity of various milks
 - Gained skill at operating rheometers, density meters, and creatinometers, as well as exposure to SQL
- **UTD Cosmology, Relativity, and Astrophysics Group**
Research Assistant June 2017 - December 2018
 - Numerically treated the General Relativistic effective three-body problem of inspiraling binary black holes subject to a third perturbing black hole with hopes to explain underlying dynamics of LIGO measurements
 - Catalogued stellar photometry data from Gaia to help facilitate an exoplanet survey led by citizen-scientists
- **Society of Physics Students**
Astronomy Committee Member November 2017 - present
 - Coordinated large-scale star parties at UTD for major astronomical events, including 2018 & 2019 total lunar eclipses, 2018 opposition of Mars, and 2020 transit of Mercury, collaborating with the Texas Astronomical Society
 - Co-led telescope training sessions, exposing community members to a variety of amateur telescopes

TECHNICAL SKILLS

- **Languages:** Python, MATLAB, L^AT_EX, HTML
- **Technologies and Frameworks:** Anton Paar Rheometry & Density Interfaces, Meade and Celestron telescopes

VOLUNTEERING

- **IntelliChoice**
Branch Manager & Head Instructor January 2018 - Present
 - Led volunteer efforts at the Vietnamese Community Center tutored math weekly to underprivileged students
 - Directed IntelliChoice SAT Summer Camp (2018-2020), boosting students' SAT scores by factors of ~ 1.5
 - Wrote and graded original, self-guided worksheets covering Algebra I & II, Geometry, and Precalculus topics
- **Richardson Public Library**
Circulation and Technology Volunteer 2017-2018

MUSIC

- **Bassist** for DFW-area professional bands, including Addis, C3 Big Band, and Stephen Houpt & Strictly Tablue
- **Coordinator** of Helbing Jazz Initiative Jam Sessions: 2019
- **Featured on** *Light on the Mountain*, *Straight Eighths*, *Strictly Tablue*, *Search for Answers*, and *White Rock Lake*

HONORS

- **Eugene McDermott Scholar** - One of twenty-three high-achieving undergraduate students selected on basis of scholarship, leadership, service, and character
- **Collegium V Honors Student** - Took advanced coursework and completed honors thesis on jazz fusion