

EDUCATION

- **University of Texas at Austin** 2021 - present
Ph.D. (expected 2026) Mechanical Engineering, Acoustics GPA: 4.0
- **University of Texas at Dallas** Class of 2021
B.S. Physics, Minor in Music, Collegium V Honors, Magna Cum Laude GPA: 3.897

HONORS & AWARDS

- **Walker Department of Mechanical Engineering 2024 Poster Competition:** third place for “Paraxial and Ray Approximations of Acoustic vortex Beams”
- **Structural Acoustics and Vibrations Student Competition:** tied for first place for “Source-driven homogenization theory for electro-momentum coupled scatterers” at 183rd ASA in Chicago, *Spring 2023*
- **Chester M. McKinney Graduate Fellowship in Acoustics:** awarded by the Applied Research Laboratories (ARL:UT) for support in acoustics research, *2022-2025*
- **T. W. Whaley, Jr. Friends of Alec Endowed Scholarship:** awarded by the Cockrell School of Engineering at UT Austin, *2021-2022*
- **Eugene McDermott Scholar:** One of twenty-three undergraduates selected for flagship scholarship at the University of Texas at Dallas, *2017-2021*

EXPERIENCE

- **Graduate Program in Acoustics at UT Austin and the Applied Research Laboratories**
Graduate Research Assistant 2021 - present
 - Studying bianisotropy, diffraction, nonlinearity, and scattering
 - Co-advised by Dr. Mark Hamilton and Dr. Michael Haberman
 - ARL Student Council President, 2023-present
 - Texas Acoustics Seminar Administrator, fall 2022
- **Acoustical Society of America (ASA)**
Biomedical Acoustics Technical Committee (BATC) student council representative 2023 - 2025
 - Serve as a conduit for information for students within BATC
 - Attend Technical Committee meetings to report on student activities
 - Promote the interests of students in the ASA and develop student-related activities within the Society
- **Department of Physics at UT Dallas**
Teaching Assistant for Electromagnetism and Waves lab 2020
- **Advanced Research in Thermo Fluid Systems (ARTS) Lab**
Undergraduate Research Assistant 2019
- **UTD Cosmology, Relativity and Astrophysics Group**
Undergraduate Research Assistant 2017-2018

PUBLICATIONS

- C. A. Gokani, M.R. Haberman, M.F. Hamilton, “Paraxial and ray approximations of acoustic vortex beams,” *J. Acoust. Soc. Am.* (in review, submitted January 19, 2024).

PROCEEDINGS

- C. A. Gokani, T.S. Jerome, M.R. Haberman, M.F. Hamilton, “Born approximation of acoustic radiation force used for acoustofluidic separation,” *Proc. Mtgs. Acoust.* **48**, 045002 (2022).

TALKS

- C. A. Gokani, J. M. Cormack, M. F. Hamilton. “Growth rates of harmonics in nonlinear vortex beams,” *J. Acoust. Soc. Am.* **154**, A328 (2023).
- C. A. Gokani, S. P. Wallen, M. R. Haberman. “Reciprocity, passivity, and causality in fully coupled acousto-electrodynamics media,” *J. Acoust. Soc. Am.* **154**, A118 (2023).
- C. A. Gokani, S. P. Wallen, M. F. Hamilton, M. R. Haberman. “Source-driven homogenization theory for electro-momentum coupled scatterers,” *J. Acoust. Soc. Am.* **153**, A120 (2023).
- S. P. Wallen, B. M. Goldsberry, C. A. Gokani, M. R. Haberman. “Computational Analysis of Sub-wavelength Scatterers exhibiting Electro-momentum Coupling,” *J. Acoust. Soc. Am.* **153**, A120 (2023).
- C. A. Gokani, Y. Meng, M. R. Haberman, M. F. Hamilton. “Analytical solution for a focused vortex beam radiated by a Gaussian source,” *J. Acoust. Soc. Am.* **152**, A56 (2022).
- C. A. Gokani, M. R. Haberman, M. F. Hamilton. “Physical acoustics homework problems written by students: undisciplined, irreverent, and original,” *J. Acoust. Soc. Am.* **152**, A168 (2022).
- C. A. Gokani, T.S. Jerome, M. R. Haberman, M.F. Hamilton, “Born approximation of acoustic radiation force used for acoustofluidic separation,” *J. Acoust. Soc. Am.*, **151**, A90 (2022).

TECHNICAL SKILLS

- **Theory:** acoustics, electrodynamics, continuum, classical, and quantum mechanics
- **Computation:** MATLAB, Mathematica
- **Writing:** L^AT_EX, HTML/CSS, Markdown, MS Office
- **Experiment:** rheometry, astronomy, spectroscopy

AFFILIATIONS

- **Acoustical Society of America, Student Member**, 2021-present
- **Texas Astronomical Society, Student Member**, 2018-2021

OUTREACH

- **Chimes by Chirag**, 2018 - present
- **Women in STEM**, volunteer, 2022 - present
- **Intellichoice**, math tutor and branch manager, 2018 - 2022
- **Society of Physics Students at UTD**, star party coordinator, 2017 - 2021
- **Helbing Jazz Initiative**, jam session coordinator, 2019-2020
- **Richardson Public Library**, volunteer, 2017 - 2020