chiragokani.org

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## **EDUCATION**

### University of Texas at Austin

2021—

M.S. (expected 2023), Ph.D. (expected 2025) Mechanical Engineering, Acoustics

GPA:

## University of Texas at Dallas

2017 - 2021

B.S. Physics, Minor in Music, Collegium V Honors, Cum Laude

GPA: 3.883

### Honors

- McKinney Fellow Fellowship awarded by Applied Research Labs (ARL:UT) for support in acoustics-related research
- Cockrell Fellow Fellowship awarded by the Cockrell School of Engineering at UT Austin in recognition of outstanding academic record
- Eugene McDermott Scholar One of twenty-three undergraduates selected for UTD's flagship scholarship; traveled to Santa Fe, Austin, and Washington, D.C. for leadership training; studied classical guitar in Valencia, Spain

## Physics & Acoustics Experience

## **UTD Physics Department**

Teaching Assistant

2020

o Taught the undergraduate lab component for Electromagnetism & Waves (PHYS 2126)

# Advanced Research in Thermo Fluid Systems Lab

Undergraduate Research Assistant

2019

• Measured fluid properties of milk to learn how fat globules affect milk's velocity-dependent viscosity

# UTD Cosmology, Relativity, and Astrophysics Group

Undergraduate Research Assistant

2017 - 2018

- Numerically treated the General Relativistic three-body problem of inspiraling binary black holes subject to a third perturbing black hole with hopes to explain underlying dynamics of LIGO measurements
- Cataloged stellar photometry data from Gaia to help facilitate an exoplanet survey led by citizen-scientists

# **UTD Society of Physics Students**

Astronomy Committee Member

2017 - 2021

 Coordinated large-scale star parties at UTD for major astronomical events, including 2018 & 2019 total lunar eclipses, 2018 opposition of Mars, and 2020 pass of NEOWISE, collaborating with the Texas Astronomical Society

# Presentations & Projects

- Acoustic Characterization of Echo Amphitheater, presented at the GSP Seminar on March 26th, 2021
- Stellar Spectroscopy, end-of-semester project for PHYS 4373 Physical Measurements Lab
- Quantum Electrodynamics, term paper for PHYS 4352 Concepts of Modern Physics
- Coriolis & Centrifugal Forces, presented at the GSP Seminar on September 25th, 2020
- Pappus's Theorem, presentation for MATH 3321 Geometry, summer 2020
- Musical Physics, presented at the GSP Seminar on October 5th, 2018
- Explaining the Solar Analema, an end-of-semester paper for PHYS 3380 Astronomy, fall 2018

#### TECHNICAL SKILLS

- Languages: Python, HTML, LATEX, MATLAB, SQL
- Technologies and Frameworks: Anton Paar Rheometry & Density Interfaces, Meade and Celestron telescopes

#### AFFILIATIONS

- Texas Astronomical Society, 2018 present
- American Physical Society, Division of Astrophysics, Division of Gravitation, Texas Section, 2020 present

#### Musician

Upright & electric bass, piano & keyboards, acoustic guitar

2016 - present

- Currently focusing on guitar performance, in the tradition of Charlie Christian, Wes Montgomery, Barney Kessel, George Benson, and Bireli Lagrene. Also studying Joe Pass, Charlie Byrd, Sylvain Luc, Tommy Emmanuel
- Studied with Russell Jackson (B.B. King), Kelly Durbin (Marchel Ivery), Enric Madriguera (Andrés Segovia), James Wilder, Brian Mulholland (Maynard Ferguson), and James Driscoll (Doc Severinsen)

#### **Custom Chimes**

Acoustician 2018 - present

• Handcraft and custom-tune wind chimes benefitting charity

# Pocono Springs Camp

Music Instructor 2021

Will teach guitar, bass, piano, and drums at 5-week summer camp in Pennsylvania

# Helbing Jazz Initiative

Coordinator 2018 - 2019

- o Coordinated jam sessions following monthly jazz masterclasses led by Stockton Helbing
- Promoted musical dialogue between community members through the language of jazz

## RECORDINGS & PROJECTS

- No More Blues, 2021
- Guitar: My College Journey, 2021
- Orphan Girl, 2020
- Ode to Friends, 2020
- The Power of Small Things, 2020
- Blues in June, 2020
- Straight Eighths, 2019
- Light on the Mountain, 2019
- Strictly Tablue, 2019
- Search for Answers, 2018
- White Rock Lake, 2018

## NOTABLE PERFORMANCES

- Advanced Jazz Improvisation Masterclass with Todd Mosby, Eisemann Center, January 23rd, 2020
- C3 Big Band, The Free Man, album release party, January 6th, 2020
- Addis featuring Austin Zhang, Shebelle, January 4th, 2020
- The Chirag Gokani Trio, Jonsson Performance Hall, November 21st, 2019
- Greg Waits Jazz Refugees, The Balcony Club, October 3rd, 2019
- Stephen Houpt & Chirag Gokani, The Taos Inn, July 16th, 2019
- Strictly Tablue, Poor David's Pub, album release party, May 17th, 2019
- Steve Miller, St. Mark's School of Texas, March 15th, 2015

# COMMUNITY ENGAGEMENT

#### IntelliChoice

Branch Manager & Instructor

2018 - 2021

- $\circ$  Directed IntelliChoice SAT Summer Camp (2018-2020), valued at \$297,000/year, boosting students' SAT scores by factors of  $\sim 1.5$  and significantly increasing college matriculation rates in the underprivileged community
- Led volunteer efforts at the Vietnamese Community Center, tutoring math weekly to underprivileged students

# Richardson Public Library

Volunteer 2017 - 2019

- Co-taught technology classes for adults and creative writing classes for children
- Assisted circulation by pulling hold items for patrons