# ZACHARY CHAIREZ

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#### **EDUCATION**

The University of Texas at Arlington

August 2020 - PRESENT

Ph.D. in Mathematics

Texas A&M University - Corpus Christi

August 2018 - May 2020 Overall GPA: 4.0/4.0

M.S. in Applied Mathematics

Thesis: "Spatial-Temporal Models of Multi-Species

Interactions to Study Impacts of Catastrophic Events"

Department of Mathematics and Statistics

Texas A&M University - Corpus Christi August 2018

B.S. in Mathematics

University GPA: 3.92/4.0

Department of Mathematics and Statistics

TECHNICAL STRENGTHS

Computer Languages R, Python

Software & Tools MATLAB, LaTeX

#### **EXPERIENCE**

## University of Texas at Arlington

Sept 2020 - PRESENT

Graduate Teaching/Research Assistant

- · Prepare, present and guide students through Calculus based assignments.
- · Creatively instill mathematical foundations in students for future mathematics and science classes.
- · Respond to students' emails quickly and respectfully with suggestions and actions necessary to complete labs.
- · During the Spring semesters, actively research relevant information pertaining to dissertation topic.

# Del Mar College

Sept 2018 - August 2020

Professional Mathematics Tutor

- · Listen, teach, and dynamically present concepts to students in Elementary Algebra to Differential Equations, as well as freshman/sophomore level Engineering and Physics.
- · Actively encourage students to ask questions.
- · Promote thought experiments, new study habits, and healthy communication skills.

## Texas A&M University - Corpus Christi

August 2018 - May 2020

Graduate Teaching Assistant

- · Prepare, present and guide students through MatLab-based calculus labs.
- · Similar job duties as current Graduate Teaching Assistant position.

# Texas A&M University - Corpus Christi

July 2019 - August 2019

Mathematics Instructor, Project GRAD

· Project GRAD is a nonprofit summer bridge program assisting students in Mathematics and English. I worked side by side with another mathematics instructor implementing various styles of hands-on mathematical learning techniques to propel struggling students to new heights.

· I lead the hands-on mathematics workshop following the lecture, engaging and challenging students to think critically and effectively.

TEXPrep June 2019 - July 2019

 $Math\ and\ Technology\ Mentor$ 

- · Work closely with middle and high school students, covering topics in logic, physics, modular arithmetic, introductory group theory, statistics, engineering and design, as well as technical and professional writing.
- · Monitor students throughout the day in and out of the classroom.

## **CONFERENCES**

CERF (Coastal & Estuarine Research Federation) 2019, Mobile, AL, Nov 04, 2019 - Nov 08, 2019

• Talk: "Spatial-Temporal Models of Multi-Species Interactions to Study Catastrophic Events"