

Anthony Frazier

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EDUCATION

Weber State University

B.S. Computational Statistics & Data Science, minor Computer Science

- GPA: 3.81
- Graduated with Honors

Ogden, Utah

April 2022

Colorado State University

Ph.D. Statistics

Fort Collins, Colorado

Expected May 2027

RESEARCH EXPERIENCE

Virginia Commonwealth University | Dr. David Chan, Dr. Indranil Sahoo

May 2021 - July 2021

- Developed multiple decision-tree-based models to predict college student GPA using student support network data
- Determined differences in important support network variables across race and gender demographics
- Cleaned and transformed a mid-sized survey data set using R

Weber State University | Dr. Julian Chan, Dr. Gavin Roberts

August 2021 - December 2022

- Evaluated effectiveness of Bracketed Difference-in-Difference against regular Difference-in-Difference method on simulated data
- Developed methodology to determine appropriateness of bracketed Difference-in-Difference implementation in varying data contexts
- Cleaned and transformed two large data sets using R

PUBLICATIONS

Bracketed vs Standard Difference-in-Differences Estimation Methods with Data Analysis on Medical Marijuana Laws and Violent Crimes

2022

- Julian Chan, **Anthony Frazier**, Gavin Roberts
- Journal of the Utah Academy of Sciences, Arts, & Letters:
<https://www.utahacademy.org/wp-content/uploads/2023/03/JUASAL-2022-full-text-final.pdf>

Decision Tree-Based Predictive Models for Academic Achievement Using College Students' Support Networks

30 December 2021

- **Anthony Frazier**, Joethi Silva, Rachel Meilak, David Chan, Indranil Sahoo, Michael Broda
- Journal of Data Science: <https://doi.org/10.6339/21-JDS1033>

PRESENTATIONS

"Decision Tree-Based Predictive Models for GPA Excellence Using College Students' Support Networks"

- Weber State University Math Factor, | October 2021
- Southern California Math REU Conference, | July 2021
- Virginia Commonwealth University RAMS conference, | July 2021

"Bracketed Difference-in-Difference Estimation to Measure the Effect of Medical Marijuana Laws on Violent Crime"

- Weber State University Undergraduate Research Symposium, | March 2022
- Utah Academy of Science Arts and Letters, | March 2022

"Decomposing Treatment Effect Estimates Using a Bracketing Approach: Application to COVID-19"

- Weber State University Math Factor, | April 2022
- 2022 Intermountain MAA Section Spring meeting | March 2022

WORK EXPERIENCE

Graduate Teaching Assistant

Colorado State University Statistics

Spring 2023

August 2022 - Present

Fort Collins, Colorado

- TA for STAT201 (Introductory Statistics)
- TA for STAT430 (Probability and Mathematical Statistics II)
- Statistics Success Center

Fall 2022

- TA for STAT201 (Introductory Statistics)
- Statistics Success Center

Mathematics Tutor

Weber State University Learning Services

August 2021 – August 2022

Ogden, Utah

- Tutored a variety of students in mathematics courses ranging from remedial math to upper division math
- Guided students to understand both mathematical concepts and studying best-practices
- Engaged in weekly training to develop communication, instruction and interpersonal skills

Supplemental Instruction Leader

Weber State University Supplemental Instruction

August 2021 – April 2022

Ogden, Utah

- Created study session plans to improve student learning for multiple Calculus II classes
- Facilitated study sessions with guided activities three times a week
- Participated in weekly training to improve facilitation, planning and communication skills

Mathematics Grader

Weber State University Mathematics Department

January 2021 – April 2021

Ogden, Utah

- Collaborated with a professor to grade Calculus I homework and other assignments
- Created grading criteria to fairly and effectively disseminate assignment scores

LEADERSHIP

President

Math Factor

August 2021 – April 2022

Weber State University

- Planted a Pi Mu Epsilon (mathematics honor society) chapter at Weber State University
- Planned, organized, and help facilitate weekly meetings

Member

Math Factor

August 2018 – April 2022

Weber State University

AWARDS

Outstanding Graduate

Department of Mathematics

April 2022

Weber State University