

# SAUL G. COVARRUBIAS

Applied Mathematician

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## EXPERIENCE

Graduate Teaching Assistant  
The University of Texas, Arlington

Aug 2017 – Ongoing    Arlington, TX

- As a GTA I instruct undergraduate students in various math course, as well as promote the use of modern technology in classrooms and group work. I encourage my students to look at a problem from multiple angles in order to understand the full scope of a problem.

Graduate Research Assistant  
The University of Texas, Arlington

Jun 2019 – Aug 2019    Arlington, TX

- As a GRA I investigated modern methods for computing sparse solutions to non-convex optimization problems, with an emphasis on EEG/MEG source estimation, and compressed sensing.

## PROJECTS

The EEG Inverse Problem  
The University of Texas, Arlington

Jun 2019 - Aug 2019    Arlington, TX

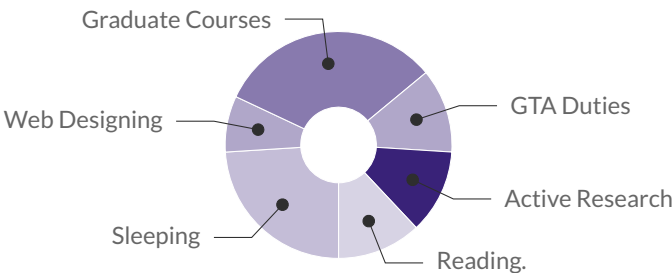
- An in depth analysis of the EEG inverse problem formulation, understanding of a priori information, and an investigation into popular methods for solving the inverse problem under a priori information.

A Graph Model for Water Allocation  
California State Polytechnic University, Pomona

Sept 2016 - May 2017    Pomona, CA

- An introductory analysis on water allocation rights in California, and simulations through the Drought Water Rights Allocation Tool.

## A DAY OF MY LIFE



## MY LIFE PHILOSOPHY

*"When we cannot use the compass of mathematics or the torch of experience...it is certain we cannot take a single step forward." - Voltaire*

## MOST PROUD OF

**First Generation College Graduate**  
The first in my family to graduate with a B.Sc, and to attend a Ph.D. program.

**SIAM President**  
Currently serving as president of the SIAM chapter at the University of Texas, Arlington.

## STRENGTHS

Convex Optimization    Combinatorics  
Probability & Statistics  
Tensor Calculus

MATLAB®    Julia    Python    Java  
Bash    LaTeX

## LANGUAGES

English    ●●●●●

Spanish    ●●●●●

## EDUCATION

Interdisciplinary Ph.D. in Mathematics and Computer Science  
The University of Texas, Arlington  
Aug 2017 - Ongoing

B.Sc. in Applied Mathematics  
California State Polytechnic University, Pomona  
Sep 2013 - Jun 2017