

Isaac Ramos

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github.com/somaramos

EDUCATION

The University of Texas at Austin, Austin, TX

May, 2022

Bachelor of Science in Biology, Computational Biology

- GPA: 3.75
- Certificate in Forensic Science
- Relevant Coursework: Computational Biology and Bioinformatics, Ecology, Genetics, Principles of Animal Behavior, Experimental Physiology, Molecular Genetics and Medicine, Data Visualization in R

SKILLS

Technical/Computer Skills: Proficient in R and Python, Familiar with Excel, Exposed to SQL and Tableau and Bash scripting

Certifications: LAFF certified

EXPERIENCE

Dr. Mark Kirkpatrick Lab, The University of Texas at Austin, Austin, TX

August 2021 - Present

Bioinformatics Assistant

- Contributed to the project *Dimensions: Ordering the microbial world into natural genetic, ecological, and functional units*
- Formulated MCMC algorithms to estimate relevant biological metrics with *Prochlorococcus* data
- Analyzed fitness effects of synonymous and nonsynonymous sites using demographic parameters and the *Prochlorococcus* genome
- Skills used: R

Dr. Hans Hofmann Lab, The University of Texas at Austin, Austin, TX

August 2021 – December 2021

Undergraduate Research Assistant

- Contributed to the project *Leveraging the Biodiversity of Central Texas to Unravel the Neuro-molecular Basis of Psychiatric Disorders in the Human Amygdala*.
- Reviewed, synthesized, and analyzed scientific literature and data bases pertaining to Central Texas biodiversity, specifically in social behavior and mating systems.
- Collaborated on script writing to analyze neuro-molecular components of the Amygdala.
- Skills used: Bash scripting and R

K12 Summit, Austin, TX

June 2019- September 2019

Visual Learning Technician

- Led a small team fostering learning for high school students preparing to take the Biology STAAR test
- Synthesized concepts of high school level biology for students
- Compiled images to help students gain confidence for standardized testing through means of flashcards

PROJECTS

- **A Deeper Look into Sex Associated Genes in Humans in the Hypothalamus:**
 - Utilized R to analyze the genetic information of sex associated genes in the Human Hypothalamus
- **A Study of Sex Associated Traits in Brown Rats and Zebrafish**
 - Utilized R to analyze DNA sequences of brain tissue in Brown Rats and Zebrafish using sex associated genes
- **Moving from Excel to Python:**
 - Reviewed techniques and workflows in python to perform data analysis that can be done Excel
- **Sentiment Analysis of IMDB Movie Scores**
 - Used machine learning models in python to predict sentiment given a movie review