# Η Estrada Rivera

We have two ears and one mouth so we can listen twice as much as we speak.

— Epictetus

#### Education

2023 - Now B.Sc. Computer Science

CCOM-UPR-RP @ San Juan, Puerto Rico

- Location: San Juan, Puerto Rico Started a bachelor's in Computer Science.
- Teacher's assistant for Proyecto Remezcla and Pre-calculus.
- Tutor for Discrete Mathematics.
- Board member of and active participant in Asociación de Estudiantes de Ciencia de Cómputos.

2021 - N/A B.A. Environmental Design (dropped)

EARQ-UPR-RP @ San Juan, Puerto Rico

- Lead a team of architects and won the Buildner International Architecture competition.
- Participated in a month-long student exchange program at <u>UNAM</u>.

### Research Experience

25/6/14 - 7/27 Cataloging Existing Data on the Math Community

MSRI-UP @ Berkeley, California US

#### 24/8 - 25/5 Domain Periodic Multidimensional Costas Sequences

CCOM-UPR-RP @ San Juan, Puerto Rico

This article focuses on finding more Costas sequence constructions that result in domain periodic or multidimensional Costas sequences.

#### 24/6/1 - 7/28 Counting Arithmetical Structures on Cycles with a Doubled Edge

 $\underline{\mathsf{VPR}^3}$  @ Philadelphia, Pennsylvania US

This article focuses on finding a closed formula for the amount of arithmetical structures on a cycle graph with a single doubled edge. We were able to simplify the problem significantly. Consequently, we were able to find a closed formula, given that this simpler problem gets solved.

#### 2024/3 - 5 Observation and Analysis of System KPP-1802

<u>UPR-RP</u> @ San Juan, Puerto Rico

This article presents the data from 10 distinct observations using the telescope network from LCO of the double star system KPP-1802.

## Teaching

2023/08 - Now Discrete Mathematics Teacher's Aid

CCOM-UPR-RP @ San Juan, Puerto Rico

Organized weekly studying sessions for the discrete mathematics students. The discrete mathematics course is known for being a very hand undergraduate class for the students in computer science.

• Highest rate of students passing happened during my first year as a teacher's aid.

#### 2023/08 Precalculus Teacher's Aid

MATE-UPR-RP @ San Juan, Puerto Rico

Assisted a professor during an advanced placement summer pre-calculus course. During this, I dedicated the morning half of the day for general class assisting and the evening half to assist students one-on-one with general questions and homework. Our class had 70 students in total.

### 2023/7 - 8 Code Your Music Summer Camp

Remezcla UPR-RP @ San Juan, Puerto Rico

Taught a variety of students ranging from middle school to high school how to make music using computer science techniques.

- 50+ students participated.
- All students succesfully put into work good programming practices.
- All students composed music they were proud of.
- Perfect attendance throughout the entire camp.
- Several students are now eager to continue studying Computer Science.

### **Projects**

#### 2023 Fractal Escape Time Renderer

Personal

Implemented a graphics renderer entirely from scratch in C++. Can render fractals, those that are plotted using an escape-time algorithm.

- Completely from scratch in C++.
- · Parallelizable algorithms.
- ≈ 200 lines of code.

### Languages

Language	<u>CEFR</u>	Quote	Years
Spanish	C2	¡Viva Puerto Rico Libre!	
English	C2	"Be kind whenever possible. It is always possible."	
toki pona	B2	\# <b>∴</b> `&	2
Japanese	A2	侘び寂び	3
French	A2	Je ne parle pas français.	5
ASL	A2		1

## Programming Languages

General Purpose	Functional	Mathematics	Web	Typesetting
<ul> <li>C++ &amp; C</li> <li>Common Lisp</li> <li>Go</li> <li>Intel X86-64</li></ul>	<ul><li>APL</li><li>BQN</li><li>Haskell</li><li>J</li><li>Nix</li><li>OCaml</li></ul>	<ul><li>Julia</li><li>R</li><li>SageMath</li><li>QCL</li></ul>	<ul><li>Gleam</li><li>Javascript</li><li>PHP</li><li>SQL</li></ul>	<ul><li>HTML</li><li>Markdown</li><li>Typst</li><li>LaTex</li></ul>

#### Interests

- · Parallel Computing
- · Digital & Analogue Photography
- Drumming
- · Backp'acking & Hiking
- · Bouldering or Rock Climbing
- Mathematics
- Language Learning

For the <u>PDF</u> version <u>click here</u>.

### Personal data:



sona@stau.space
https://stau.space/

**A** stau

**(b)** 0009-0000-6779-8166

sona.42