

# Johan Benedict Arroyo Cristobal

Math Graduate Student @ University of Nebraska-Lincoln  
jcristobal2@huskers.unl.edu — (818) 749-4330

---

<b>EDUCATION</b>	<b>M.S. in Mathematics</b> University of Nebraska-Lincoln	expected May 2022
	<b>B.S. in Mathematics of Computation</b> University of California, Los Angeles	received June 2020
<b>RESEARCH INTEREST</b>	Computational Partial Differential Equations, solving PDEs related to simulating and animation of environmental phenomena. Dynamical systems and its application to world-building.	
<b>PAPERS WRITTEN</b>	<b>[1] Title of Paper</b> Co-Authored/Advised by: Status: Published? Submitted? In which Journal? Publication? DOI?	
	<b>[2] Title of Paper</b> Co-Authored/Advised by: Status: Published? Submitted? In which Journal? Publication? DOI?	
<b>NOTABLE TALKS GIVEN</b>	<b>Home Base for Space Camp</b> September 8, 2020, first ever talk! Students Partially in Differential Equations Reading Seminar (SPiDERS) “We’ll start with introducing what makes a space... a space. Then work our way through adding structures and rules to end the talk on Continuous Function spaces.”	
<b>TEACHING EXPERIENCE</b>	<ol style="list-style-type: none"><li>1. Fall 2020, Recitation Leader — Math 106 - Calculus I</li><li>2. Winter and Spring 2020, Peer Learning Facilitator — Physics 1A - Physics for Scientists and Engineers: Mechanics (UCLA)</li><li>3. Fall 2019, Peer Learning Facilitator — Physics 1A - Physics for Scientists and Engineers: Mechanics (UCLA)</li></ol>	

## **WORK EXPERIENCE**

**Peer Learning Facilitator** for Academic Advancement Program  
September 2019 - June 2020  
UCLA AAP Peer Learning Unit

- As a Peer Learning Facilitator, ran multiple study sessions per week to further solidify knowledge in a specific course.
- Implemented Critical Race Theory into the pedagogy to highlight and combat societal power dynamics in a way that allows students to thrive as both scholars and holistically.
- Met with instructor and attended lectures to craft weekly worksheets specific to the students' needs.

**Digital Archivist (Work-study)** for Rock Art Archive  
October 2017 - September 2019  
UCLA Cotsen Institute of Archaeology

- As a Digital Archivist, scanned documents in the Rock Art Archive for data management and file upkeep
- Examined written data and photographic evidence for accuracy and hypothesis-testing while aiding in the creation of an electronic record

## **AFFILIATIONS**

**Pacific Math Alliance** Undergraduate Member/Mentee  
June 2019 - Present

- Participated in the Facilitated Graduate Applications Process, under the guidance of William Ott, University of Houston
- In attendance for conferences tackling diversity in STEM:
  - + 2019 PMA Conference at CSU East Bay, CA (Oct 2019)
  - + 2019 Field of Dreams Conference at St. Louis, MO (Nov 2019)

## **SKILLS**

- Programming: C, C++, Python, Matlab, LISP, SQL and HTML/CSS
- Archaeological Studies: ArcGIS, text processing, georeferencing
- Language(s):
  - + English (fluent)
  - + Filipino/Tagalog (fluent)
  - + Spanish (beginner)
- Content Creation:
  - + Videos: <https://www.youtube.com/user/johanmode>
  - + Graphics: <https://johanmcs.github.io/johanc/design.html>
  - + Web Design: <https://johanmcs.github.io/johanc>

**NON-MATH  
RESEARCH  
EXPERIENCE**

**Independent Contractor**

for the Easter Island Statue Project

October 2017 - September 2019

Easter Island Statue Preservation

- Advisor: Dr. Jo Anne Van Tilburg.
- Research assistant for research of the Easter Island and its various archaeological and geographical aspects.
- Under guidance, wrote a research article arguing about the sustainability of a long held archaeological categorization (set for publication within Dr. Van Tilburg's next publication).
- Transcribed and normalized data from previous researchers for ease-of-access and usability in data management and analysis.
- Quickly synthesized tutorials and instructions in ArcGIS to perform tasks within the geographical information systems realm.

**Collaborative Research Project**

for Downtown Women's Action Coalition

October 2019 - December 2019

Service Learning component of Chicano/Chicana Studies 10B

- Participated in researching the "culturally sensitive services" pertaining to the unhoused/homeless women at "Skid Row" in Los Angeles, California.
- Produced a research report for the Downtown Women's Action Coalition and found a deficit in the number of research and studies done on gender-specific issues related to the question

**AWARDS**

- Dean's Honor List (UCLA, 2018)
- Valedictorian (Stockton Early College Academy, 2016)