San Juan, PR christopher.ayala@upr.edu

# Curriculum Vitae

#### **Education**

**Undergraduate Studies in Natural Sciences** 

2019-Present

University of Puerto Rico-Río Piedras Campus, San Juan, PR

Minor Concentration in Computer Science

**Undergraduate Studies in Natural Sciences** 

2012-2017

University of Puerto Rico-Río Piedras Campus, San Juan, PR

Major Concentration in Molecular and Cellular Biology

High School Graduate from Puerto Rico Christian School, Toa Baja, PR

2012

### **Research Experiences:**

**Challenge to Innovate: NASA Edition** 

March 2021 – Present

Challenge to Innovate (CTI) is a program designed for university students in STEM concentrations to ideate, research, and develop commercialization plans for a subset of NASA patented technologies.

- The goal is to prepare students to present and explore the possibility to create a business derived from hardware solutions designed for the agricultural and pharmaceutical manufacturing sectors.
- Acquire skills in product development, commercialization and pitch delivery that prepare them to complete a successful .

#### **Voice Programming Research**

Sponsored by PR-LSAMP

San Juan, PR

August 2020 - Present

- On-going research project to develop a voice programming language and be able to code by voice in an IDE.
- Currently working scientific paper manuscript and paper publication.

### **Internship Program**

IDI-BD2K and IQ BIO REU UPR Rio Piedras

San Juan, P.R.

June 2020 - July 2020

 Virtual REU NIH and NSF sponsored programs. Training and practice for fluency in quantitative skills, data analysis, and bioinformatics and myriad opportunities for career development.
 Research topic in Big Data Science and its applications to research.

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#### **Clinical Research**

PICU Research Team, UPR Medical Sciences Campus San Juan, P.R. January 2015 – May 2017

• Collected data from subjects for analysis, analyzed statistical data, collaborated in scientific paper manuscript, poster presentation, scientific paper publication, and reviewed scientific literature.

## **Work Experiences:**

### Saint Monica Bilingual School, Full Time, Carmín Rodríguez (director)

2018-2019

- High School Science Teacher (7<sup>th</sup> 12<sup>th</sup>) and Environmental & Science Club Coordinator
- Weekly Class Planning and Parent-Teacher Conferences
- Prepare test and homework, and correct those as well; I came to realize that test and homework are directly proportional to corrections
- Teaching Strategies Workshops
- Mentor high school students, provide emotional support when needed, class planning to prepare classes, among other responsibilities.

## Caffiato/Sartenes/Linguini, Rengel A. Ayala

2014-2017

- Manager
- Host and bartender
- Manage Payroll responsibilities, aid in the hiring process, prepare work schedule, among other tasks.

## Royal Canin, Ana Vecchini

2014-2016

- Sells Promoter
- Provide nutritional advice to dog and cat owners
- Participate in dog shows and competitions

### Volunteer program, Dr. Santiago Ulloa

2013-2014

• Accompanied doctor in patient visits and surgeries.

#### **Awards**

• IQ-BIO-REU Hackathon: First Place

2020

 Haddock-De Jesús, R.L., Puig-Ramos, A., Martín- De Pumarejo, M., Ayala-Griffin, C., Hernández-Javier, A.R., Puig, G. (2016) TRAP (Transport Risk

2016

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2016
2015
2015
2009 and 2012
2009 and 2012
2009-2012
2006-2012
2006-2008

## **Skills**

- Cybersecurity fundamentals
- Python and R for Data Analysis
- Programming: C++, C, Python, R, PHP, Java, JavaScript, SQL, noSQL, OCaml, ML, MATLAB, HTML
- Microsoft Office Word, Excel, and PowerPoint
- Fully bilingual (Spanish and English) in both writing and oral communication.

# **Specialized Courses**

•	Collaborative Institutional Training Initiative (CITI Program) – Human Biomedical Research Course and CITI Health Information Privacy and Security HIPS for Clinical Investigators Course	2020
•	Differentiated and Inclusive Strategies to Increase  Academic Performance Professional Workshop	2018
•	Problem Based Learning as Strategy to Increase  Academic Performance Professional Workshop	2018
•	Collaborative Institutional Training Initiative (CITI Program) – Human Biomedical Research Course and CITI Health Information Privacy and Security HIPS for Clinical Investigators Course	2014

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# **Affiliations**

- Member, Asociación Estudiantil de Ciencias de Cómputos
- Member, American Chemical Society
- Member, Med-Life
- Member, American Medical Student Association

# **Extracurricular and Volunteer Work**

•	Grupo Plan de Acción Comunitaria Sur de PR	2020
•	5-K Pediátrico	2017
•	Tennis Time Torneo Juvenil	2017
•	CAUCE UPRRP	2016
•	A.C.S. UPR-RP	2014
•	Med-Life	2014
•	National Honor Society	2009-2012
•	Hogar del Niño Ave María	2007-2012
•	Parroquia Santísima Trinidad	2008-2011