

Juan Pablo Bolaños Cuyun

E-mail: jbolanos@uncc.com

PROFESSIONAL SKILLS

- Bioinformatics Analysis
- Genomics
- Python Programming
- R Programming
- Java Programming
- Structural Biology
- Biostatistics
- Data Bases Design
- Phylogenetics
- Metabolomics
- Molecular Sequence Analysis
- Energy and Interaction in Biological Modeling
- Business of Biotechnology
- Microsoft Office Certified
- Bioinformatics Pipeline Design
- Bilingual (Spanish & English)

EDUCATION

Ph.D. in Bioinformatics and Computational Biology

University of North Carolina at Charlotte
Computing and Informatics Department
Charlotte, North Carolina 28213
Expected Graduation: May, 2024

Master of Science in Bioinformatics

University of North Carolina at Charlotte
Computing and Informatics Department
Charlotte, North Carolina 28213
May, 2021

Bachelor of Science in Business Administration.

Emphasis in Financial Services and Economics
Lander University
Greenwood, South Carolina 29649
May, 2017

Minor in Computer Information Systems.

Emphasis in Databases and Software Development.
Lander University
Greenwood, South Carolina 29649
May, 2017

High School

IMG Pendleton School
5650 Bollettieri Blvd.
Bradenton, Florida 4210
May, 2013

Juan Pablo Bolaños Cuyun

E-mail: jbolanos@uncc.com

PROFESSIONAL EXPERIENCE

University of North Carolina at Charlotte - Charlotte, NC

Graduate Research Assistant (May 2021- Present)

Lab: Dr. Cynthia Gibas and Dr. Jessica Schlueter

Sars-Cov-2 Genome/Variant Sequencing

- Used Illumina's Software for Sample Base Calling and Alignment.
- Researched integration of Pangolin, NextClade, and Variant Calling Database (VDB) on our pipeline.
- Ran Pipeline that analyze Sars-Cov-2 Samples.
- Automated Scripts to detect Sars-Cov-2 Lineages.

Association of Public Health Laboratories (APHL)

New Hampshire Department of Health & Human Services

Genomic Data Specialist(May 2021- August 2021)

Lab: Molecular Diagnostics Lab

- Processed raw sequencing data to consensus genomes and review.
- Tracked, reviewed and submitted SARS-CoV-2 sequence data to national and international data repositories, such as GISAID and the National Center for Biotechnology Information (NCBI) GenBank.
- Performed quality analysis and review SARS-CoV-2 variants identified in the sequences.
- Inferred SARS-CoV-2 phylogenetic trees and local Nextstrain builds.

University of North Carolina at Charlotte - Charlotte, NC

Graduate Teaching Assistant (August 2020- May 2021)

Course: Bioinformatics Programming

- Worked with the lead Professor to monitor the class schedule.
- Revised lesson material with students individually or in small groups.
- Graded course material
- Wrote quizzes on a weekly basis.

University of North Carolina at Charlotte - Charlotte, NC

Graduate Research Assistant (August 2020- Present)

Lab: Dr. Cynthia Gibas Dr. Jessica Schlueter

Sars-Cov-2 Wastewater Project

- Developed pipeline algorithms for Sars-Cov-2 data.
- Build tool to convert .bed to .vcf files.
- Build tool to find SNPs in Sars-Cov-2 data.
- Handled analysis of Sars-cov-2 Consensus Sequences.

University of North Carolina at Charlotte - Charlotte, NC

Graduate Research Assistant (April 2020- August 2020)

Lab: Dr. Jessica Schlueter

Recruitment Module Project

- Explored different software tools for bioinformatic analysis.
- Analyzed wastewater to find traces of Covid-19 on campus.
- Developed a module for school recruiting purposes (still a work in progress).

Juan Pablo Bolaños Cuyun

E-mail: jbolanos@uncc.com

University of North Carolina at Charlotte - Charlotte, NC

Graduate Administrative Assistant (August 2019- April 2020)

- Received and coordinated delivery of lab samples for the department.
- Managed Social Media for the department.
- Helped in redesigning the department's landing page.
- Created a video explaining what the bioinformatics Masters program has to offer. (Current department's website)

Greenwood Genetic Center – Greenwood, SC.

\$26 million Genetic Research and Diagnostic Center

Bioinformatics Analyst (July, 2017 – August, 2018)

- Performed detailed analysis of Next-Generation Sequencing data for research and diagnostic purposes.
- Helped transition to an in-house pipeline for running scripted algorithms to find trends in human DNA.
- Built SQL database for Patient record-keeping.
- Fluency in several programming languages.

Greenwood County Community Foundation – Greenwood, SC.

\$5 million community foundation.

Internship (January, 2017 – May, 2017)

- Led the foundation's process in building their current database.
- Created multiple category structure database of more than 3,500 contacts.
- Updated computers to the latest Windows Software.

Lander University ITS Department – Greenwood, SC

Help Desk Student Worker (2015 - 2017)

- Supervised students through troubleshooting hardware issues.
- Guided staff through steps on how to fix network problems.
- Worked with faculty members on how to improve their technological skills.
- Took care of on-campus hardware.

Lander University Academic Success Center - Greenwood, SC

Spanish Tutor (2013 - 2015)

- Aided the university's Spanish department with grading assignments.
- Help group and individual study sessions.
- Helped in grading Spanish 1 and Spanish 2 final verbal presentations.

Juan Pablo Bolaños Cuyun

E-mail: jbolanos@uncc.com

GRANTS AND SCHOLARSHIPS.

Outstanding Graduate Teaching Assistant Nomination

University of North Carolina at Charlotte

Class: Bioinformatics Programing II

Award: \$1,000

Year: 2021

LICENSES AND CERTIFICATIONS

The National Society of Leadership and Success

Presidential Member

3.2+ Graduate GPA

Year: 2021

Microsoft Office Suite Certification

Certification in Word, Excel, Power Point, and Outlook

Year: 2010