

MARTINEZ ALDANA JUAN PABLO

Biochemical Engineering B.Sc.

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PERSONAL DETAILS

Date of Birth : 1997 / 04 / 13
Citizenship: COLOMBIAN

INTERNATIONAL EDUCATION

Videogame Designer
TOKIO NEW TECHNOLOGY SCHOOL
📅 2021 - Currently 📍 Lisbon, Portugal
Fields of Study:
• Programming video games and reality virtual with unity 3D.
• Level design process, and history telling.

NATIONAL EDUCATION

B.Sc Biochemical Engineering
UNIVERSIDAD DE ANTIOQUIA
📅 2015 - 2021 📍 Medellin, Colombia
Fields of Study: Biotechnology, Molecular biology, and Genetics.

INTERNATIONAL RESEARCH

Advisor iGEM competition FCB-UANL
UNIVERSIDAD AUTONOMA DE NUEVO LEÓN
📅 2021 - 2022 📍 Monterrey, México
Advisor of the team FCB UANL in the competition IGEN-Leagues.
• Reviewer of the math model developed, in the project, and the simulation and code implementation in python.
• Advisor of the physical structure of the biofilter, and the design of a virtual 3D prototype.
• Advisor of the enterpreurnship plan, and the cost simulation of the project.

Contestant iGEM competition-UANL
UNIVERSIDAD AUTONOMA DE NUEVO LEÓN
📅 2020 - 2021 📍 Monterrey, México
Contestant of the Synthetic Biology competition iGEM
International Genetically Engineered Machine .
• Modeling Fed Batch Bioreactor for the production of recombinant protein Ranaspumins 1-6 using Escherichia coli
• Techno-economic evaluation and conceptual design of a large-scale plant of an ecological foam for ABC and forest fires using the software super pro designer

DISSERTATION WORK

BSc Thesis
Bioinformatic analysis of the Streptomyces clavuligerus transcriptome and establishment of an interaction network associated with clavulanic acid metabolism.
• Proposal of a gene interaction network, based on data of gene expression, that allows understanding possible regulatory patterns mainly associated with clavulanic acid metabolism.
• Performance of bioinformatic analysis of the Streptomyces clavuligerus gene expression data, emphasizing the differentially expressed genes associated with clavulanic acid biosynthesis.
• Design and development of a gene co-expression network using the platform Cytoscape.

TECHNICAL STRENGTH

Linux Bash	●●●●●
C#	●●●●●
Python	●●●●●
JavaScript	●●●●●
HTML	●●●●●
CSS	●●●●●
React	●●●●●
Unity	●●●●●
Galaxy for Bio-informatics	●●●●●
MS Office	●●●●●





STRENGTHS

- Good at decision making
- Able to work under pressure
- Good with conflict resolution
- Good at time management
- Target oriented
- Able to travel
- Flexibility and Adaptability

IN PROGRESS

Online Courses
UDEMY
📅 2020 - 2021 📍 Home
• Game Development with Unity.
• Linux commands: from scratch to programming Shell Script.
• Penetration Testing and Ethical Hacking with Python 3.
• Machine Learning: Data Science in Python.

HOBBIES

-  Literature
Reading novels, scientific articles and science fiction books
-  Music
Playing the bass and the guitar
-  Sports
Swimming and running
-  Travel
fond of traveling to exotic places

NATIONAL RESEARCH

Research Assistant

BIOPROCESOS (BIOPROCESS RESEARCH AND DEVELOPMENT GROUP)

📅 July 2019 - Jun 2020

📍 Medellín, Colombia

Support in the experimental development of the project and perform the analysis of obtained data using the bibliography available.

- Development of a biofilter for the treatment of contaminated air produced by the poultry industry (2018).

SIDELINE ACTIVITIES

Sports Instructor

UNIVERSIDAD DE ANTIOQUIA - SECCIONAL ORIENTE

📅 July 2019 - November 2020

- Planning of sports tournaments in the University.
- Support in administrative activities.
- Giving swimming lessons to students.

Rehabilitation Instructor

OLIMPIC-SWIMMING POOL, Rionegro - COL

📅 february 2014 - March 2020

- Improving swimming skills services for people with any disability can be mental or physical, including down syndrome, blindness and deafness.
- Planning and monitoring the implementation of the rehabilitation plan and inclusion to the social life.
- Introduction to the competitions tournaments mainly focus in swimming and athleticism.

CERTIFICATES

- Presented my research work at the "XXIII National and XVII International Meeting of Student Research Groups (RedCOLSI foundation) " (2020).
- Presented my research work at the "XIII National Scientific Technical Day of Chemical Engineering" at Universidad de Cartagena, Cartagena, Colombia (2018).
- Attended and successfully completed the online course "Programming for Everybody (Getting Started with Python)" from Michigan University Rionegro, Colombia (2019).
- Participated in "First Encounter of Biochemical Engineering and Agroindustrial Engineering Student Research Groups" at Universidad de Antioquia - Seccional Uraba Carepa, Colombia (2017).
- Participated in the "IV. Colombian Congress for Computer Biology and Bioinformatics" Santiago de Cali, Colombia (2017)

LANGUAGES

Spanish : Native Speaker



English

Speaking: C1

Writing: C1

Reading: C1



Portuguese

Speaking: B1

Reading: B2

Writing: B1



REFERENCES

PhD. Juan Carlos Quintero Díaz

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✉ Faculty of Chemical Engineering - Medellín, Colombia

PhD. León Felipe Toro Navarro

@ lfelipe.toro@udea.edu.co

✉ Bioprocess Research Group - Medellín, Colombia