CHEMICAL ENGINEER / RESEARCH & DEV / PYTHON DEV JR.

Fabián Leonardo Rondón G., 27 years

@ flrondong11@gmail.com   @ flrondong@unal.edu.co   ☎ +57 301 413 2080   ♦ Bogotá D.C., Colombia

in https://bit.ly/3iAlsJS   ○ Fabian11LRG   ⌘ www.muuds.co

PROFILE

Chemical Engineer specialized in Bioprocess, currently pursuing a Ph.D. in Biological Sciences at the University of Alberta, with experience in research, development, and process automation using Python, My-SQL, SQL, and Visual Basic, among others. Professional expertise in research and development, optimization of sales logistics, database creation, development projects management, among others.

Knowledge of tools such as Python, software development, Bash, SQL, MySQL, C++, Visual Basic, advanced excel, POO, database management and design (CRM), metabolic engineering, enzymatic and biochemical engineering, molecular thermodynamics, and computational quantum chemistry.

RESEARCH EXPERIENCE

Generation of a metabolic-scale model of photoinhibition and photoacclimation phenomena linked to the genome-scale metabolic model of the microalgae *Chlorella vulgaris*

Universidad Nacional de Colombia – Bogotá Campus

📅 January 2019 - January 2020   ♦ Bogotá D. C., Colombia

- Undergraduate thesis. Complementation of the metabolic dynamics of **photosynthesis**. Light effects on the metabolic model, based on quantum and physiological phenomena. Thesis supervisor: Prof. Ruben Dario Godoy Silva, Ph.D.

Colombian Absinthe production at pilot scale

Universidad Nacional de Colombia – Bogotá Campus

📅 October 2018 - December 2018   ♦ Bogotá D. C., Colombia

- Fermentation process designer and researcher

Projects on the Chemical and Biochemical Processes Research Group

Universidad Nacional de Colombia - Bogotá Campus

📅 July 2014 – March 2020   ♦ Bogotá D.C., Colombia

- Non-catalytic improvement of biocrude obtained by hydrothermal liquefaction of microalgae – Research Assistant (September 2016 – January 2019)
- Design and construction of a micro-bioreactor for the determination of commercial yeast's (*Saccharomyces Cerevisiae*) kinetic growth model – Researcher and Designer (March 2016 – May 2016)
- Evaluation of the use of bromelain enzyme for enzymatic treatment in tanneries industry – Researcher (February 2016 – august 2016)
- Design and construction of a photobioreactor for microalgae culture – Research Assistant (July 2014 – December 2014)

EDUCATION

Ph.D. in Biological Sciences

University of Alberta

📅 July 2023 – Ongoing

Chemical Engineering

Universidad Nacional de Colombia - Bogotá Campus

📅 January 2013 – March 2020

Academic Graduate - High School

Instituto San Pablo Apóstol (ISPA)

📅 2008 – 2012   ♦ Bogotá D.C., Colombia

Music Technologist

SENA - ISPA Agreement

📅 2009 – 2012   ♦ Bogotá D.C., Colombia

WORK EXPERIENCE

BI Analyst Jr.

Teleperformance

📅 November 2022 – June 2023

- ReCalls App development, using several techniques such as clustering, SQL, pandas and python coding

Development Eng. - Chemical Eng.

Discordoba S.A.S.

📅 May 2021 – September 2022

- Technical advisor of chemical products use for customer's product developments
- Designer and programmer for new algorithm in chemical certificates update logistics
- Development of market studies for broadening the chemical portfolio

Researcher, CTO and Co-founder

MUUDS Colombia - StartUp

📅 September 2019 – May 2021

- Researcher in the manufacture and pharmacokinetic optimization of Nicotine Salts
- Developer of formulations for the product line
- Designer of production laboratory

ACHIEVEMENTS, HONORS AND AWARDS

🏆 **Scholarship Credit Program 2022**
Awarded by: Colfuturo - MinCiencias
June 9, 2022

🏆 **Scholarship for "Study visits/Study seminars and practicals in Germany by groups of foreign students"**
Awarded by: DAAD - German Academic Exchange Service
April 2017

🏆 **Scholarship for two study semesters at the Universidad Nacional de Colombia**
Awarded by: Welfare of the Faculty of Engineering
March 2017

🏆 **2nd place in the National University Olympics of thermodynamics (OUT)**
Awarded by: AIChE - Universidad Nacional de Colombia
November 27, 2015

RELEVANT COURSEWORK

M.Sc. subjects
Universidad Nacional de Colombia - Bogotá Campus

- Advanced Biochemical Engineering (2018-I)
- Physico-chemical and biological process dynamics (2017 - II)
- Selected topics in theoretical chemistry (2017 - II) (Quantumn computational chemistry basics)
- Reactor Analysis (2019 - I)

Seminars and Courses
Universidad Nacional de Colombia - Bogotá Campus

- Theoretical-Practical course about brewing
- Update day in algal biotechnology
- Microalgae as raw material for production of biofuels. CABBIO (2020)

Programming courses
Platzi

- Backend development with Python & Django (October 2020 - Currently)
  - Learning of SQL, Anaconda, Git & Github, Python, POO, Pandas, PowrBI, among others

PUBLISHING

Metabolic-scale module of photosynthesis in the genome-scale metabolic model of the microalgae *Chlorella vulgaris* involving photoinhibition and photoacclimation phenomena

📅 April 2022 - In process   📍 Bogotá D. C., Colombia

WORK EXPERIENCE

Research and Development Practitioner
ALFAGRES S.A.

📅 January 2018 – July 2018

- Researcher of product improvement: Formulation and research of ceramic coverings (Work on laboratory, pilot and production plant)
- Development of dilatometries simulator – Researcher and programmer
- Development of the new formulation program for ceramic coverings

SOFTWARE SKILLS

- Programming

Visual Studio Code | Matlab® | Bash
WSL2 | PowerApps | Anaconda
MySQL | MySQL Workbench

- Chemical Process Simulation

ASPEN® Plus | ASPEN® Hysis
AutoCAD Plant 3D
AutoCAD 3D Modeling | OpenFOAM

- Metabolic and Biological Simulations

CobraPy | Cobra Toolbox
SuperProDesigner

- Others

Mendeley | OverLeaf | Office 365
PowerBI | SAP | Photoshop

PROGRAMMING SKILLS

Visual Basic | Latex | Matlab | Python
Pandas | Git & Github | C++ | Fortran
Bash - Linux | SQL

LANGUAGES

English ●●●●○
IELTS Score (2021): 6.5 - High intermediate proficiency

French ●●○○○
A2

Spanish ●●●●●
Native language

PROFESSIONAL REFEREES

Prof. Lisa Y. Stein, Ph.D.

@ stein1@ualberta.ca

✉ UNIVERSITY OF ALBERTA

📞 +1 587 987 2431

Prof. Ruben Dario Godoy Silva, Ph.D.

@ rdgodoys@unal.edu.co

✉ UNIVERSIDAD NACIONAL DE COLOMBIA

📞 +57 300 790 8131

Prof. Alvaro Orjuela Londoño, Ph.D.

@ aorjuelal@unal.edu.co

✉ **Universidad Nacional de Colombia**

📞 +57 300 547 9962

EXTRACURRICULAR ACTIVITIES

Labrex Colombia

StartUp for cleaning and disinfection products

📅 Feb – Aug 2020   📍 Bogotá D.C., Colombia

Co-founder, CTO and Researcher

Pianist

📅 2012 - 2017

- Ingeniería Tropical - Salsa Orchestra of the Faculty of Engineering - Universidad Nacional de Colombia (February 2015 – November 2017)

- The Beat Robbers - Pianist of the Ska Fusion Band (December 2012 – October 2014)