

WORK EXPERIENCE

- High Scala UCamp Utel

March 2023 – March 2024

Data Science and AI Specialist

Mexico City (Remote) , (Valid Mexican Work Permit)

 - Guidance on Artificial Intelligence (AI) and Machine Learning (ML) and Natural Language Processing (NLP)
 - Mentorship based on Google Colab Python programming using frameworks such as Angular, and Fast API for e-learning in EdTech. All of these worked with SQL, Full Stack, LLMs, OpenAI, JS, Postman, Java, Html, CSS
 - Personalized advice, methodological planning in a team, development of study material, group management
- University of Massachusetts Lowell

June 2022 – December 2022

Staff Researcher:

Lowell, MA

 - Developer of an AI algorithm that utilizes biometric data analysis Biometric analysis in SQL, Python, and MATLAB to accurately predict motor and cognitive fatigue through kinematic analysis
 - Provided interdisciplinary support for a virtual play aimed at rehabilitating individuals with neurological injuries
- Universidad Militar Nueva Granada

September 2017 – February 2020

Staff Engineer:

Bogota, COL

 - Evaluation of AI models for stress prediction from physiology and analysis of VR video games. Projects under Python, C#, Html, SQL, Java, SolidWorks, MATLAB, LabVIEW, Excel, Docker, Backend, RESTful API, Unity.
 - Developer of a serious game that incorporated analysis of physiological and biomechanical user signals within a virtual reality environment, specifically targeting upper limb and balance applications
This project takes part in the design and implementation of an assessment system to evaluate patient engagement and its impact on stabilometric therapies (2018-2019)
 - Additionally, contributed to the design and construction of a robotic platform for demining purposes in Colombian territory (2017) with a successful 3D design, mechanical, and electronic assembly of a Hybrid Mobile Robot with Rocker-Bogie suspension, featuring a 3 degrees of freedom Arm
- Ingautin de Colombia Ltda.

December 2015- August 2017

Projects Engineer

Bogota, COL

 - Contributed productively to more than 10 clients encompassing automation, industrial process supervision, data management, and the design, testing, and installation of electrical control panels. Tools AutoCAD, EPLAN
 - Scoped work involved integration with sensors, electro-pneumatic, and hydraulic actuators, along with PLCs, HDMI's, and AC/DC drives under brands as Allen Bradley, Siemens,Schneider, ABB, Mitsubishi.
 - Demonstrated expertise in configuring networks and providing remote access support via Ethernet, RS-232, RS-485, Remote I/O, VLAN, and VNC. Projects Management as Rockwell Automation System Integrator

EDUCATION

- Instituto Politécnico Nacional (IPN) México

Defense August 2023

PhD in engineering , Majors: Robotics Systems and Mechatronics

Mexico City, MEX

 - cum laude thesis with GPA of 9.88 out of 10.0
 - Studied abroad at the University of Massachusetts Lowell during the summer/fall 2022 semester in the USA
- Universidad Militar Nueva Granada

Graduation April 2020

MSC of engineering Majors Mechatronics, Minors: Rehabilitation engineering, Robotics

Bogota, COL

 - GPA of 4.60 out of 5 in Mechatronics, strong academic performance and dedication
 - DAVINCI Research Group Member, focused on Rehabilitation Engineering Robotics with virtual reality (VR)
- Universidad Militar Nueva Granada

Graduation April 2017

Bachelor of Engineering(BE /BS), Majors Mechatronics, Minors: Industrial Automation, Virtual Reality

Bogota, COL

 - GPA of 4.03 out of 5 in Mechatronics, showcasing strong academic performance and dedication to excellence
 - Active member and bassist in a dynamic rock band, expressing collaboration, creativity, and musical proficiency

SKILLS

Data Science; Hardware in the Loop (HIL); Software in the Loop (SIL); technical leadership; strategic planning; strategic partnerships; modeling & forecasting; signal processing; project management; Power BI; Jira; Lean UX; Agile Methodologies.

CERTIFICATIONS

Scholarship Fully funded PhD (México), and extra-stipend stay in University of. Massachusetts Lowell
Languages EF Standard English Test (EF SET) EF Standard English Test (EF SET) Issued Aug 2023
Data Analysis Google Data Analytics Certificate: Issued Jun 2023 Credential ID GEEX6ZSRP8SX
UX Design Curso de Lean UX: Issued Apr 2023 ID 2c9f162e-8e34-467a-b3ab-2e33a53b75b6
Research Understanding Research Methods: Issued Apr 2023 Credential ID CZ2L2SREVSQE
Management Project Management B&M