

ADRIÁN CONSTANTE

DATA AND IOT ENGINEER

 ad_con.reload@protonmail.ch |  [LinkedIn](#) |  [GitHub](#)

Skills

- Python | MongoDB | Git | PostgreSQL | ORM | Tableau | Power BI | Spark | Agile | Google Data Analytics | MSSQL | REST API | GitHub
- Cloud Computing | Azure Developer Associate | IoT | Machine Learning | Postman | Docker | NGINX | Heroku | Containers | VM's | Linux
- CI/CD | Unit Testing | OOP | Embedded C | Distributed Systems | Databricks | Spanish, English – All professional proficiency or above

Experience

Dynamics 365 Developer

Havvox IT

Mexico City, Mexico 01/2022 - 06/2023

- Designed and implemented **more than 30 enterprise-level issues among D365 enhancements and bugs, SQL queries, data visualization** in order to background workers and stakeholders, which **doubled the speed they resolve their tasks** using **Azure, D365 X++, MS SQL, Power BI and MSSQL Server**.
- Led the development of several products E2E, from **identifying system requirements, software implementation, engineering, testing, event-handlers and documentation**.
- Enriched system data input and output by integrating and maintain tables, views and data entities; facilitated in-depth import of data and creation of reports **leading to a more effective communication with stakeholders**. **High adaptability** and how to **team work** was needed to deliver the **best possible outcome**.
- Continuous Integration/Continuous deployment, pull requests, code reviews with **Azure DevOps and Git**.

Research Assistant

CERN

Geneva, Switzerland 11/2018 - 12/2018

- Led the design of the software to **automate the extract of raw data** from an oscilloscope and proposed new sensor with **Python, Linux Bash and statistical analysis**, all of this in order to enhance AD and V0 ALICE's detectors.
- Data was transform into a readable format, **making it easier for my team** to extract data into analysis to measure the performance of sensor, which **led to a correction from a preliminary 6% to a corrected 14% particle detection increase**, which proved in practice a higher quality data representation. Hence the **project was in count for the next cycles of upgrades of ALICE**.

Research Assistant

Universidad Autónoma
de Sinaloa

Sinaloa, Mexico 09/2018 - 10/2018

- Engineering owner of the data signal protocols on FPGA, which **allow the team to read raw data from a high-end new sensor**.
- Designed a data pipeline for the raw data to **make statistical data analysis possible for my team** once in CERN.
- Acted with leadership and time management, then **scheduled temates each task planned for CERN**, which led to a completion of the main goal with minor changes.

Research Assistant

CINVESTAV Guadalajara

Jalisco, Mexico 11/2017 - 12/2017

- Designed and implemented with analytical thinking a **data modeling and data visualization software** in collaboration with a project called "Haptic Robot Arm for Rehabilitation of the Upper Limbs", **making rehabilitation measurable** was achieved using **Python and Tableau**.
- It was aimed to help kids with rehabilitation setting up routines to improve their entire superior members, **kids were able to achieve at least an increase of 27% of the strength of their both arms in a period of one month**.

Education

MSc. Computer Science

CINVESTAV Guadalajara

Jalisco, Mexico

- Master Degree in Computer Science
- **Research Thesis:** Hardware Module for LSTM gates acceleration
- **Coursework:** Software Engineering, Data Structures and Algorithms, Machine Learning, Distributed Systems

BE. Biomedical Engineering

Universidad Politécnica de
Sinaloa

Sinaloa, Mexico

- Bachelor Degree in Biomedical Engineering
- **Coursework:** Databases, OOP, Image & Signal Processing, Time-series data.

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Major Projects

- [Electronic Health Record System\(2020\)](#): Agile teamwork to deploy a blockchain-based distributed database about EHR, ensuring the fidelity and secrecy of patient data. I launched the Ethereum Smart Contracts needed to access control on who can CRUD patient and medical workers data and how it was retrieved or uploaded in distributed storage IPFS. **I used Postman to test RESTful APIs that were used.**
- [Facial Gesture-driven Wheel Chair\(2018\)](#): A special electric wheelchair was build for quadriplegic people using computer vision and deep learning (CNN). I was in charge of the data acquisition and image processing to train the model with facial gestures. We used and trained a PyTorch image classifier, ResNet18, with 87% accuracy in a GPU AWS instance.
- **SeaHawk: Security for Mazatlan's beaches(2018)**: Computer vision system able to recognize if people were too off the coast. Main idea was to help lifeguards in Mazatlan Beaches so we used a Mask-RCNN. My main task was image process to segment the video between beach, sea, and people, then with help of my team train the model on GPU AWS instance. [We won a hackathon with it.](#)

Continuous Learning & Certifications

- [Google Data Analysis](#)(2023) - **Progress at 50%**
- [Azure Developer Associate](#)(2023) - **Progress at 50%**