**Skills** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
• Python | NoSQL | Git | PostgreSQL | MySQL | MongoDB | Tableu | Power BI | Spark | Hadoop | Agile | Google Data Analytics | MSSQL  
• Azure DevOps | Cloud Computing | CI/CD | Unit Testing | OOP | Azure Developer Associate | Raspberry Pi | IoT | Machine Learning  
• CI/CD | Unit Testing | OOP | C++ | C | Java | Distributed Systems | Backend | Spanish, English – *All professional proficiency or above*   
**Experience** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **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**.

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| **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 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.**

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| **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 managment, then **scheduled temates each task planned for CERN**, which led to a completion of the main goal with minor changes.

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| **Reseach 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 Tableu**.

• 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** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **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

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| **BE. Biomedical Engineering** |  | **Universidad Politécnica de Sinaloa** |  | *Sinaloa, Mexico* |

• **Bachelor Degree in Biomedical Engineering**

• **Coursework:** Databases, OOP, Image & Signal Processing, Time-series data.

**Major Projects** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
• [Electronic Health Record System(2020)](https://github.com/alison82/MedicalHistory-BlockChainProject): 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.

• [Facial Gesture-driven Wheel Chair(2018)](https://github.com/SenoReload/deep-chair): 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.](https://youtu.be/ac4CCbhhrU0?t=30)

**Continuous Learning & Certifications** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
• [Google Data Analysis](https://www.coursera.org/programs/analisis-de-datos-google-2023-st4ow/professional-certificates/analisis-de-datos-de-google)(2023)

• [Azure Developer Associate](https://learn.microsoft.com/es-es/certifications/azure-developer/)(2023)