

OSMIN LARREYNAGA

San Salvador, El Salvador

+503 76399378 hectorosminn@gmail.com [Osmin Larreynaga](#) [osminlab](#)

HARD SKILLS

Languages: SQL, Python, C/C++, JavaScript (Node.js).

Developer Tools: Linux, Git/GitHub, VS Code, Docker, Looker & Tableau, Google Cloud Platform (BigQuery, Dataflow, Dataform, Cloud Storage, Cloud Functions).

Libraries/Frameworks: Pandas, NumPy, Scipy, TensorFlow, Matplotlib, Plotly, Apache Beam.

Data Skills: Data Integration, Data Cleaning, Data Visualization, ETL Pipelines, Workflow Automation.

EXPERIENCE

N1CO Technology

Nov 2023 – Present

Data Engineer

Santa Elena, Antiguo Cuscatlán

- Develop and optimize data pipelines using **BigQuery, Dataflow, and Dataform** for efficient **ETL workflows**.
- Design and maintain **Google Cloud-based data infrastructure**, ensuring reliability and scalability.
- Developed interactive dashboards and reports using data visualization tools, and executed ETL processes to support analytical needs.
- Collaborated with stakeholders to **convert business requirements into data insights**, enhancing decision-making.

Don Bosco University

Jul 2024 – Present

Aerospace Researcher & Project Manager

Soyapango, San Salvador

- Collaborate with **students and professionals** on mission design, hardware selection, and testing procedures.
- Lead **electronics and Command & Data Handling subsystem** for High Altitude Balloon CubeSat U1.
- Organize and participate in aerospace **workshops, talks, and research publications**.

PROJECTS

CubeSat U1 | El Salvador's First Nanosatellite

Jun 2024 – Present

Manager, Research and Development

- Support **mission planning, testing, and integration processes**.
- Collaborate with Don Bosco University and external aerospace partners.
- Lead electronics and Command & Data Handling subsystem development for CubeSat U1.

High Altitude Balloon | StratoBalloon Mission

Jan 2023 – Dic 2024

Student, Research and Development

- Contributed to a research project with **Don Bosco University and Micro Macro Observatory**.
- Work on **trajectory simulation and tracking systems** for near-space missions.
- Assisted in selecting **software and hardware** for aerospace experiments.

EDUCATION

Mechatronics Engineering

2019 – 2024

Bachelor's degree, Don Bosco University

Soyapango, San Salvador

Electronic Engineering Technician

2016 – 2018

Associate's degree, Don Bosco University and Ricaldone Technical Institute

San Salvador

High School Diploma

2014 – 2016

Industrial High School Diploma, Electronic Option, Ricaldone Technical Institute

San Salvador

ADDITIONAL FORMATION

Platzi

2021 – 2024

Courses in machine learning and data science

Online

DataCamp

2023 – 2024

Courses focused on data manipulation techniques

Online

English Courses

2013 – 2016

Salvadorian American Cultural Center

San Salvador

CONFERENCES AND PUBLICATIONS

Selección de Antenas UHF para una Misión Near-Space en un HAB

IEEE Central America and Panama Student Conference (CONESCAPAN)

- A. Reyes, O. Larreynaga, M. Pleites, A. Martínez, G. Vásquez, J. Aldana

Sep 2022

San Salvador, El Salvador

Simulation of HABs Trajectory in the Stratosphere for Near-Space Missions

1st Central American Space Congress, CEC 2023

- O. Larreynaga

Sep 2023

San José, Costa Rica

AWARDS / RECOGNITIONS

Sideralis Scholarships Congress

1st Central American Space Congress (CEC2023)

- Recognized as an aspiring space leader from Central America

Sep 2023

San José, Costa Rica

VOLUNTEERING

IEEE Member & AESS Student Chapter Treasurer

Young Profesional Member & Volunteer

- Organized webinars, workshops, and aerospace events.
- Led member expansion and outreach strategies.

Apr 2022 – Present

San Salvador

SGAC | National Point of Contact (NPoC) for El Salvador

Space Generation Advisory Council (SGAC) Member

- Represent El Salvador in global space discussions.
- Connect students and professionals to international space opportunities.

Jan 2024 – Present

International

Glasswing | Robotics Club Leader

Mentoring & Teacher

- Instructed children on Lego robotics to support constructivist learning.

2017

San Salvador

REFERENCES

Napoleón Cornejo

Advisor of my degree thesis, Director and Founder of www.geokapti.nl

- ncornejo@geokapti.nl T: +31 (0) 624936572

Netherlands

Brisa Terezón

Executive Director of Micro Macro Observatory, Don Bosco University

- brisa.terezon@udb.edu.sv T: +503 7146-1626

El Salvador