

# GABRIEL SANTIAGO MURILLO BARRAGAN

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Bilingual Biomedical Engineer specializing in Data Science, bridging a unique background in medicine with expertise in Python, SQL, and Machine Learning. Proven ability to translate complex biomedical challenges into data-driven models and AI-powered health technologies. Eager to apply computational skills to a research or data science role focused on solving critical problems in the healthcare sector.

## Education

<b>Universidad de los Andes</b> <i>Bachelor of Science in Biomedical Engineering</i>	<b>January 2017 - October 2022</b> <i>Bogotá D.C., Colombia</i>
<b>Servicio Nacional de Aprendizaje (SENA)</b> <i>Technical Undergraduate with a Specialization in Commerce and Finance</i>	<b>January 2015 - November 2016</b> <i>Yopal, Casanare</i>
<b>Universidad Nacional de Colombia</b> <i>Foundational medical training aimed at bridging clinical knowledge with data science and biomedical engineering.</i>	<b>July 2022 - July 2025</b> <i>Bogotá D.C., Colombia</i>

## Certifications & Professional Development

- **IBM Data Science Professional Certificate**, IBM
- **Neural Networks and Deep Learning**, *DeepLearning.AI*
- **Introduction to Clinical Data Science**, *University of Colorado System*
- **Python for Everybody Specialization**, *University of Michigan*
- **IBM Data Analyst Professional Certificate**, IBM
- **Project Management Principles and Practices Specialization**, *UC Irvine*

## Skills

**Programming Languages:** Python, R, SQL, MATLAB

**Data Science & Machine Learning:**

*Frameworks & Libraries:* Scikit-learn, TensorFlow, PyTorch, Pandas, NumPy, SciPy

*Areas of Expertise:* Regression, Classification, Clustering, NLP Basics (spaCy, NLTK)

**Data Visualization & BI:** Matplotlib, Seaborn, Power BI, Tableau, Advanced Excel

**Cloud, Databases & Tools:** AWS (S3, SageMaker), Docker, Git/GitHub, SQL Databases

**Languages:** Spanish (Native), English (C1 Certified)

## Experience

<b>Fundación de Educación Superior Nueva América (FESNA)</b> <i>Associate Professor in Statistics and Data Analysis Tools</i> <ul style="list-style-type: none"><li>• Designed and instructed comprehensive curricula for virtual courses in <b>Python</b> and advanced <b>MS Excel</b>, focusing on practical business intelligence and data analysis applications.</li><li>• Developed engaging learning modules, including hands-on projects and interactive activities, to translate complex data concepts into accessible skills for diverse learners.</li><li>• Cultivated an interactive, results-oriented learning environment across synchronous and asynchronous platforms, mentoring students to achieve course objectives through practical application and continuous feedback.</li></ul>	<b>September 2024 – March 2025</b> <i>Bogotá D.C., Colombia</i>
<b>Teleperformance</b> <i>Bilingual Supervisor</i> <ul style="list-style-type: none"><li>• Analyzed and visualized team KPIs using <b>Tableau</b> and <b>MS Excel</b> to identify performance trends and inform data-driven action plans.</li><li>• Mentored and coached a bilingual team of customer service representatives, developing targeted training programs and feedback mechanisms to systematically improve performance against client metrics.</li><li>• Collaborated with Quality Assurance and Workforce Management to align team strategies with client objectives, ensuring consistent service quality and achievement of KPIs.</li></ul>	<b>January 2023 – September 2023</b> <i>Bogotá D.C., Colombia</i>
<b>Teleperformance</b> <i>Bilingual Customer Service Representative</i> <ul style="list-style-type: none"><li>• Delivered high-quality customer support for a multinational banking client, resolving complex inquiries and ensuring clear communication in a bilingual (English/Spanish) environment.</li></ul>	<b>June 2022 – December 2022</b> <i>Bogotá D.C., Colombia</i>
<b>Accounting Technician</b> <i>Topografía Pozos Profundos Aguas Subterráneas LTDA</i> <ul style="list-style-type: none"><li>• Managed the full-cycle accounting process, ensuring the accuracy, integrity, and compliance of all financial records and transactions.</li><li>• Prepared and analyzed key financial statements (income, balance sheets) to support strategic business decisions.</li></ul>	<b>September 2015 – October 2016</b> <i>Yopal, Casanare</i>

## Academic & Research Projects

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### EEG/fMRI Signal Classification with Python

December 2021

- Applied signal processing and machine learning algorithms using **Scikit-learn** and **NumPy** to classify neural patterns in complex EEG and fMRI datasets.
- Developed computational models to analyze neural responses, contributing to neuroinformatics research applications and demonstrating skills in handling time-series data.

### Automated Anomaly Detection in Medical Imaging

June 2020

- Implemented computer vision techniques with **OpenCV** and **Scikit-image** to automate the segmentation and feature extraction from MRI and X-ray images.
- Designed a data processing pipeline to support the identification of potential diagnostic markers, emphasizing data integrity and workflow automation.

### Epidemiological Modeling of Dengue Transmission

June 2022

- Developed a computational model in **Python** to simulate the epidemiological dynamics of Dengue, applying mathematical algorithms to forecast disease spread.
- Analyzed the potential impact of various public health interventions, showcasing skills in systems modeling and predictive analysis.