

OMAR HUMBERTO SANCHEZ MENDEZ  
(+34) 639155213  
[geolhumberto@gmail.com](mailto:geolhumberto@gmail.com)  
[Linkedin](#)  
[GitHub](#)  
[sanmen.es](http://sanmen.es)



Madrid, Spain

Geoscientist with 8+ years of experience in geophysical exploration, geological modeling, and data-driven research. Specialized in integrating advanced computational methods with geophysical datasets for subsurface characterization. Proven track record in 3D magmatic system modeling, seismic interpretation, and petroleum reservoir analysis. Currently applying machine learning techniques to geophysical inverse problems and large-scale geological data integration. Seeking to pursue doctoral research in computational geophysics with focus on seismic imaging, subsurface modeling, and geophysical data interpretation.

LANGUAGE PROFICIENCY

- **English:** Upper Intermediate (CEFR B2)-Duolingo 105/160 Certificate: [certs.duolingo.com/imau46nrtgh17ilf](https://certs.duolingo.com/imau46nrtgh17ilf).
- **Russian:** Fluent (Russian Language Course – Fundamentals of Translation).
- **Spanish:** Native

EDUCATION

DATE

- Master's in Mineral Resources and Geological Risks. Specialization: Geological Risks. University of Barcelona, Spain. 2016 – 2017
- Bachelor's Degree in Geology (Oil and Gas Deposits). Russian University of Peoples' Friendship, Russia. 2006 – 2011

PUBLICATIONS & RESEARCH

- **Peer-Reviewed Publications(Under Review)** 2025  
Sanchez Mendez, O. H. Machine Learning–Driven 3D Modeling of the Magmatic System Beneath Deception Island, Antarctica. Manuscript under review (preprint available).
- **Master's Thesis** 2016- 2017  
3D Modeling of the Magmatic System Beneath Deception Island (Antarctica): Integration of Geophysical and Petrological Data. University of Barcelona, Spain. Integrated geophysical data (seismic, gravity, magnetic) with petrological analysis to construct a comprehensive 3D model of the active volcanic system.
- **Bachelor's Thesis** 2011  
Geological Structure of the Condor Block and Reservoir Conditions of the Mirador 2 Oil- Bearing Layer, Colombia Peoples' Friendship University of Russia. Characterized petroleum reservoir properties using seismic interpretation , well log analysis, and structural geology methods.

CERTIFICATIONS

AWS CERTIFIED CLOUD PRACTITIONER

AWS RE/START GRADUATE

AWS CERTIFIED CLOUD PRACTITIONER

AWS RE/START GRADUATE

ARTIFICIAL INTELLIGENCE FUNDAMENTALS

DATA FUNDAMENTALS

ARTIFICIAL INTELLIGENCE FUNDAMENTALS

DATA FUNDAMENTALS

AWS CLOUD QUEST: GENERATIVE AI PRACTITIONER

AWS CLOUD QUEST: GENERATIVE AI

TECHNICAL TRAINING

DATE

- Fundamentals of Generative AI on AWS. 09-19-2025

▪ Big Data Spark Developer (Cloudera). CFTIC GETAFE (200 hrs).	07-30-2025
▪ AWS Data Analyst (200 hrs). Experis Academy, ManPower Group. Preparation course for AWS Data Analytics – Specialty.	07-12-2025
▪ AWS Solutions Architect -Experis Academy, ManPower Group. Preparation for certification: AWS Certified Solutions Architect – Associate.	06-03-2025
▪ Data Sciences (500 horas). Tajamar Tech (500 hrs).	09-27-2024
▪ AWS re/Start Graduate (420 hrs). Foundation Altius. Training for AWS Certified Cloud Practitioner certification.	07-16-2024
▪ Web Application Development (DAW) (510 hrs). CFTIC GETAFE. Professional Certificate - Level 3.	02-28-2024
▪ Python Data Visualization (150 hrs). CFTIC GETAFE.	07-29-2023

PROFESSIONAL EXPERIENCE	DATE
<b>Viewnext.</b> Madrid – Spain Data Analyst. <ul style="list-style-type: none"> <li>Managed data in Oracle environments.</li> <li>Conducted data exploration , visualisation, and analysis; created interactive dashboards and reports with Amazon QuickSight.</li> <li>Integration of QuickSight with Amazon Redshift, Amazon S3, and Amazon Athena for scalable solutions to analyse large volumes of data.</li> </ul>	2024- 2025
<b>Orbis Terrarum.</b> Madrid – Spain Geologist. <ul style="list-style-type: none"> <li>Performed geotechnical studies for renewable energy projects(wind/solar) across 3 continents using geophysical prospecting and stability analysis.</li> <li>Managed in-situ testing (pull-out) and foundation treatments (micropiles) for rail infrastrucuture.</li> <li>Developed corrosion solutions for ports using lab data and predictive models.</li> </ul>	2020- 2024
<b>BUHO.</b> Madrid - Spain. (Remote) Translator <ul style="list-style-type: none"> <li>Translator (Russian-Spanish, Spanish-Russian)</li> </ul>	2018- 2020
<b>Petrosystems of Venezuela S.A.</b> Bogota DC – Colombia. Geological Logger. <ul style="list-style-type: none"> <li>Monitored mud logs, cuttings, and core samples during drilling to identify geological formations.</li> <li>Coordinated with drilling engineers and petrophysicians to adjust well trajectories based on findings.</li> <li>Verified quality of electrical, sonic, and nuclear logs (Gamma Ray, Resistivity, Density-Neutron).</li> </ul>	2012 - 2016
<b>Petroservices Ambiental SAS.</b> Florencia- Caqueta. Geologist <ul style="list-style-type: none"> <li>Collected primary data for Environmental Impact Assessments (EIAs) in exploratory drilling areas</li> </ul>	2012
<b>MERIDIAN CONSULTING LTDA</b> Bogota - Colombia. Geologist <ul style="list-style-type: none"> <li>Reprocessed seismic data for the VIM Basin (Northern Colombia)</li> </ul>	2012
<b>Petroseismic Services S.A.</b> Bogota DC- Colombia Junior Field Quality Control Geologist.	2012

#### TECHNICAL STACK

- **Geophysical Methods & Software:** Geophysical Methods:(Seismic reflection/refraction, Electrical resistivity tomography (ERT), Gravity, Magnetics). Seismic Interpretation:(2D/3D seismic data processing and interpretation). Well Log Analysis:(Petrophysical interpretation, Formation evaluation). 3D Geological Modeling:(Voxler, RISINFO, Subsurface visualization).
- **Cloud Solutions:** AWS (EC2, S3, RDS, VPC, DynamoDB, Lambda, CloudWatch).
- **Programming & Data Science:** Python (NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, SciPy). Machine Learning:(Supervised/unsupervised learning, Neural networks, Regression models). SQL: (Oracle, PostgreSQL, MySQL). Statistical Analysis: Hypothesis testing,
- **Cloud Computing & Big Data:** AWS (EC2, S3, Redshift, Glue, Lambda, Athena, QuickSight, CloudWatch), Big Data Frameworks: (Apache Spark), Hadoop (HDFS, Hive, Hbase, Impala, Yarn). Databases: (Oracle, PostgreSQL, DynamoDB, MongoDB, MySQL). Data Visualization: (Amazon QuickSight, Python visualization libraries).
- **Programming Languages & Tools:** Languages: Python, SQL, Java (Spring Boot), JavaScript(React), Scala. Version Control: (Git, GitHub). Operating Systems:(Linux, Windows). Web Development:(HTML5, CSS3, React(for data visualization applications).
- **Additional Technical Competencies:** Teaching programming fundamentals and database management(SQL/NoSQL). Cloud architecture design and implementation. Network configuration and server administration