

Geoscience Professional focused on delivering reliable, high-quality technical work. Known for improving productivity by combining domain expertise with modern tools and data-driven workflow design. Strong collaborator with a reputation for learning quickly, adapting to established workflows, and supporting teams with practical, dependable solutions. Portfolio with applied case studies available at: [pedroalfonzo.com](https://pedroalfonzo.com)

## SKILLS & TECHNICAL EXPERTISE

- **Geophysical & Geological Analysis:** Seismic acquisition, LWD/MWD log interpretation, velocity modeling, drilling operations, petrophysics, sedimentology, structural geology, data QC.
- **Modeling & Visualization:** Petrel, OpenWorks (Decision Space), ArcGIS, 3D geomodeling, image log interpretation.
- **Programming:** Python, C#, SQL, .NET Core, VBA, HTML/CSS, Jupiter note book, Visual Studio
- **Optimization & Data Science:** Workflow automation, Dashboards (Excel and Power BI), and performance tracking for enhanced efficiency.
- **Project Management & Communication:** Research, team leadership, technical sales, client communication, reporting, and collaboration across multidisciplinary teams.

## EDUCATION & TRAINING

- **M.Sc. Petroleum Geoscience**, Royal Holloway, University of London — Sep 2013 – Aug 2016 Thesis: "Build a 3D Geomechanical Model as a Tool to Characterize Mechanical Rock Properties for Drilling Optimization"
- **Reservoir Geomechanics Course**, Stanford University — Apr 2014 – Jun 2014
- **B.Sc. Geophysical Engineering**, Simón Bolívar University, Venezuela — Sep 2001 – Feb 2007 Thesis: "Processing of Seismic Reflection Data from Skåne Area, Southern Sweden" (Sweden 2006)
- **Undergraduate Exchange Student (courses and written thesis)**, Uppsala University, Sweden – Sep 2005– Jun 2006.
- **Post Graduate Program in Artificial Intelligence & Machine Learning**, University of Texas at Austin – McCombs School of Business — Aug 2020 – Apr 2021
- **.NET Core Web Development (C#, OOP, SQL, HTML, CSS)**, ComIT, Saskatoon — Sep 2022 – Nov 2022.

## PROFESIONAL EXPERIENCE

### BRANDT INDUSTRIES CANADA LTD

Saskatoon, SK, CA. 2023 - Today.

#### QUALITY ASSURANCE & ASSEMBLY

Improved NCR processing speed and reporting consistency by building automation tools (Python, JS, macros) that reduced repetitive tasks from hours to minutes. Developed dashboards and metrics that strengthened data visibility and supported more informed QA and supply-chain decisions. Consolidated multi-department datasets using Power Query ETL, cutting QA presentation preparation time by ~80%.

### SAUDI ARAMCO, consulted by Saudi Geophysical.

Khobar, K.S.A. 2017 –2022

#### SENIOR OPERATION GEOLOGIST | Geo-steering Operation Center.

- Maintained a **90%+ geosteering success** rate by adapting quickly to evolving workflows and applying advanced geophysical interpretation techniques.
- Led **geological data interpretation and data management** for active drilling wells, ensuring accurate seismic correlation and timely decisions.
- Applied advanced **MWD/LWD log interpretation** (Deep Azimuthal Resistivity, Magnetic Resonance, Density Imaging, Spectral GR, etc.) to optimize well placement and reservoir exposure.
- Updated and validated **geological models** in DecisionSpace, improving 3D visualization and reducing interpretation uncertainty.
- Integrated **core logging** with real-time logs to refine interpretations and enhance drilling accuracy.

- Collaborated within a 14-member team, supporting the monitoring of up to 10 wells per shift and ensuring clear communication across disciplines.
- Prepared technical reports and ensured compliance with safety, environmental, and quality standards.

## WEATHERFORD

*International Assignments (Colombia, Mexico, UAE) | 2013-2016*

### Senior Well Placement Geologist / Well Placement Coordinator

- **Reduced daily reporting time from 2 hours to 15 minutes** by automating workflows (VBA), increasing operational efficiency across multiple teams.
- **Enhanced real-time decision-making** through dashboards that improved data visibility for client offices and multidisciplinary teams.
- **Increased operational consistency** by creating SOPs and standardizing well placement workflows across regions.
- **Strengthened drilling execution** across three countries by improving data accessibility and streamlining field-to-client communication.

**Abu Dhabi, UAE (2015–2016):** Improved project execution by delivering technical presentations and ensuring alignment with scope, schedule, and budget across multidisciplinary teams.

**Villahermosa, Mexico (2014):** Increased operational consistency by developing SOPs and streamlining communication between field engineers and client teams.

**Bogotá, Colombia (2013–2014):** Enhanced subsurface evaluation accuracy by conducting geological analysis and improving data accessibility through structured geological databases.

## HALLIBURTON, Sperry Drilling Venezuela.

*Venezuela. 2008 - 2012*

### Reservoir Navigation (Well placement) Geologist.

- Optimized well trajectories and reservoir exposure by interpreting LWD and geophysical data in real time.
- Accelerated adoption of next-generation drilling tools, contributing to a **10× market share increase (2008–2011)** through enhanced drilling precision.

## BGP INTERNATIONAL OF VENEZUELA, S.A.

*Venezuela. 2007 – 2008*

### Geophysicist | Field Qc & Seismic Field Data Processor:

- Ensured high-quality seismic acquisition and processing by overseeing field data QC and analysis across all operational phases.
- Increased daily productivity by **50%** through an Excel automation tool that streamlined repetitive processing tasks.

## PUBLICATIONS

Palermo, J., Ramos, J., Jurado M., Brazon, C., PDVSA Petrocedeño; Rondon, L., Alfonzo, P., Bonalde, A., Garcia, W., Halliburton, "Multilateral and Geosteering Technologies as a Solution for Optimum Drainage of Heavy Oil of Thin and **Heterolithic** Sands in Junín Block of the Orinoco Oil Belt", SPE International 2012.

## LANGUAGES

**Spanish** (Native), **English** (Fluent, CLB 8), **French** (Modest, CLB 4), **Arabic** (Basic)

## VOLUNTEERING & INTEREST

- Teaching Assistant | ComIT Web Development with Python (Sept–Dec 2024) – Mentored students and assisted with project development.
- Youth Soccer Coach (U4–U7, 2023–2025) – Focused on team development and sportsmanship
- Interests: Web Development, Optimization, Machine Learning, Programming, Clean Energy.
- Sport: Triathlon.