

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

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. Apr 2023 - Today.

QUALITY ASSURANCE & ASSEMBLY (Apr 2023-present)

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. Jan 2017 – May 2022

SENIOR OPERATION GEOLOGIST | Geo-steering Operation Center.

- **Technical & Strategic Contributions:** Maintained a 90%+ success rate, swiftly adapting to new workflows and technologies to enhance geophysical data interpretation.
- **Geological Data Management:** Led geological data interpretation and quality control for active drilling wells, ensuring accurate seismic analysis and timely data collection.
- **Well Logging & Geophysical Analysis:** Applied advanced **MWD & LWD log interpretation**, utilizing cutting-edge tools: Deep Azimuthal Resistivity, Magnetic Resonance, Density Imaging, Gamma Ray Imaging, Spectral Gamma Ray, Density & Neutron Logs.
- **Geo-Modeling & Visualization:** Maintained and updated geological models using Decision Space, performing **3D visualization and correlation to refine interpretations**.
- **Core Logging & Real-Time Analysis:** Oversaw **core drilling operations**, integrating **petrophysical core descriptions** to enhance real-time log interpretation.

- **Collaborative Operations:** Worked as part of a **14-member team**, directly assisting in the monitoring of up to **10 wells per shift**, ensuring effective communication and coordination.
- **Project & Compliance Oversight:** Provided technical expertise for drilling programs, prepared technical reports/memos, and ensured compliance **with safety, health, environmental, and quality standards**.

WEATHERFORD

International locations. Jan 2013 – Dec 2016

Senior Well Placement Geologist | Abu Dhabi, U.A.E. (Jan 2015 – Dec 2016)

- Utilized **Petrel** to generate **3D surfaces and inversion models** from electromagnetic measurements.
- Led engineering commitments, ensuring alignment with **scope, schedule, budget, and procedures** for successful project execution.
- Delivered **technical sales presentations** across **Latin America and U.A.E**, collaborating in a fast-paced **multidisciplinary team**.
- Automated daily reporting using **MS Visual Basic**, reducing routine workload from **2 hours to 15 minutes**.
- Developed **real-time dashboards** for client office visualization, enhancing data accessibility.

Well Placement Coordinator | Villahermosa, Mexico (Apr – Dec 2014)

- Created **Standard Operating Procedures (SOPs)** and supervised **well placement operations** for optimized performance.
- Facilitated **effective coordination** between **field engineers and clients**, ensuring seamless execution.

Senior Well Placement Geologist | Bogotá, Colombia (Jan 2013 – Apr 2014)

- Conducted **geological analysis** to support drilling operations, ensuring accurate subsurface evaluation.
- Developed and maintained **geological databases**, streamlining data accessibility for engineering teams.

HALLIBURTON, Sperry Drilling Venezuela.

Venezuela. June 2008 - Dec 2012

RESERVOIR NAVIGATION (WELLPLACEMENT) GEOLOGIST. (Jan 2010 - Dec 2012)

- Interpreted LWD and geophysical data to optimize well trajectories and reservoir exposure.
- Championed the implementation of next-generation tools, driving a **10× increase in market share (2008–2011)** through improved drilling precision.

BGP INTERNATIONAL OF VENEZUELA, S.A.

Venezuela. Feb 2007 – May 2008

GEOPHYSICIST | Field Qc & Seismic Field Data Processor:

- Oversaw **field data acquisition, processing, and seismic analysis**, ensuring accuracy and efficiency across all operational phases.
- Developed an **Excel macro**, streamlining daily workflows and reducing repetitive tasks by **50%**, enhancing productivity.

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.