

Noah Vento

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WORK EXPERIENCE

WaterBridge

Analytics Engineer

Feb. 2024 – Present

- Coded a probabilistic decline curve analysis feature to apply risk to forecasts, enabling planning engineers to generate thousands of scenarios in minutes.
- Managed the planning database using SQL to maintain well schedules, historical data, and forecasts, supporting accurate planning and cross-team collaboration.
- Developed a battery volatility metric to evaluate operator pump ratability, supporting a successful challenge that led an upstream operator to drop a proposed \$1M charge.
- Created a pipeline cost forecasting model using probabilistic risk analysis, now required for Authorization for Expenditures (AFEs) to support improved decision making.
- Pulled vehicle route data from the Samsara API and analyzed efficiency metrics, validating operational changes implemented by VPs.
- Built an automated workflow to flag anomalous volumetric readings, cutting QA/QC cycle time by over 75%.
- Regular utilization of Python, SQL, Git, Docker, Azure, APIs, and Spotfire.

ExxonMobil

Geoscientist & Data Scientist

Oct. 2020 – Feb. 2024

- Re-mapped a ~7 TCF gas reservoir in offshore Mozambique, passing peer review with senior technical leads.
- Designed AI-driven subsurface tools in PyTorch for business units, reducing interpretation time by over 90%.
- Built a Python repository for trend-fitting and anomaly detection in seismic data, resulting in a conference abstract.
- Led ArcGIS StoryMaps adoption for Upstream knowledge sharing, creating apps with over 1,000 internal views.

SKILLS

Python, Spotfire, Git, SQL, Azure, Docker, Linux, ArcGIS, Petrel, RokDoc, Geoteric, Paleoscan, Artificial Intelligence, Microsoft Office, Adobe Suite

COURSES & WORKSHOPS

Complete Web Developer in 2024, Zero to Mastery Academy

- Gained hands-on experience in full-stack web development and learned to build responsive web pages.
- Covered modern technologies and frameworks including HTML, CSS, JS, React, and Node.js.

CONFERENCE ABSTRACTS & PRESENTATIONS

Vento, N., Liu, E., and Johns, M., 2023, A deep learning workflow for petro-mechanical facies predictions in unconventional, International Meeting for Applied Geoscience & Energy 2023.

Powers, H. and Vento, N., 2023, Spatially varying Chi volumes: A study in offshore Australia on background trend calculation from the Shuey two-term approximation, International Meeting for Applied Geoscience & Energy 2023.

EDUCATION

Colorado State University

Master of Science, Geosciences (GPA: 4.0 / 4.0)

Aug. 2018 – May 2020

- Thesis: “Hypothesis-based Machine Learning for Deep-water Channel Systems”

Texas A&M University

Bachelor of Science, Geology (GPA: 3.73 / 4.0)

Aug. 2014 – May 2018