CHRISTOPHER DORION

Geoscientist
Denver, USA

Education

2007- Bachelors in Geology
with Petroleum Emphasis; Minors in Mathematics and Physics; Western Colorado University

2011- Build-it: Geosciences
Fixed-step training program; SLB

Proficiencies

Domain

Reservoir modeling	4
fracture modeling	3
Workflow automation	4
Uncertainty analysis	4
Structural modeling	4
Seismic well tie	3
Seismic Interpretation	3
Seismic attributes	3
Microseismic interp	2
Res. Characterization	3
Subsurface mapping	3
Well correlation	3
Geodata Management	4

Technology

SLB Petrel	5
SLB Studio	4
SLB Petromod	3
IHS Petra	2
IHS Kingdom	3
ESRI ArcGIS	2
Dataiku DSS	2
Python	2

1 (beginner)----------5 (Industry leader)

Social

@cdorion
@ChristopherDorionGeo
@ChristopherDorion

Visit my website!

Summary

I am a geoscientist practicing in the energy industry for 16 years and specializing in data driven, integrated 3D reservoir model construction. I have worked extensively on reservoir characterization projects across North America in both conventional and unconventional Petroleum Reservoirs. I also devote my time towards training and education, offering virtual and in-house customized courses in software and geomodelling, which I have taught around the world.

Work History

Integration Consultant; Geocomputing Group **2024-Present**
Denver Colorado, United States
Supports and advises clients globally in geoscience software infrastructure, workflows, and data management/migration solutions for all major industry software platforms. Establishing technical direction for OSDU Data Platform implementation, and integrating Machine Learning/Automation into the RiVA Platform.

Senior Geologist; SLB **2016-2024**
Denver Colorado, United States
Supports and advises the North American geoscience communities in Petrel and Studio software suites, with a focus on data integration and geocellular modeling projects. Acts as technical lead in SLB geomodeling projects across North America. Organizes and implements multi-asset scale data migrations and deployments, including data restructuring, hardware/software configuration, and training of technical staff. Also teaches fully customized courses in Petrel, Studio, and Applied Geostatistics throughout the world using in-house data .

Support Geologist; SLB **2007-2015**
Houston Texas, United States
Supported Colorado, California, and Alaska in Petrel and Studio workflows. Acted as staff geologist with client driven reservoir characterization projects. Worked helpdesk support in Petrel and GeoFrame software suites on Geology workflows. and taught introductory and intermediate courses in Petrel and Studio.

Tutor/TA/Field tech; Western Colorado University **2007-2010**
Gunnison Colorado, United States
Assisted students in the laboratory, graded homework assignments, acted as van operator and safety officer in the field for a variety of classes including Applied Geophysics, Sedimentology & Stratigraphy, Physical Geology, and Igneous/Metamorphic Petrology. Also assisted students with a variety of mathematics and physics related homework problems in the tutoring center. Focused on algebra, probability and statistics, calculus (single and multivariable), mathematical modeling, and general physics.

Certifications & Training

- **NExT Training instructor certifications** for 13 active courses and 5 retired
- **ML Practitioner and Advanced Designer certificates** from Dataiku Academy
- **Introduction to Data Science Certificate** from IBM
- **Geographic Information Systems Certificate** from UC Davis
- **Python for Everybody Certificate** from University of Michigan
- **Fundamentals of Petroleum Geostatistics** from Clayton Deutsch; University of Alberta
- **Reservoir Geomechanics** from Mark Zoback; Stanford

References Available upon request.

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Publications, Presentations, & Patents

Kristensen, Morten; Dubost, Fransois Xavier; Dorion, Christopher; Mullins, Oliver C. **Method for De-risking Reservoir Architecture through simulation of fluid charge.** U.S. Patent 63/515379, filed July 25, 2023. Provisional patent.

Ruiz, E., Thilbodeaux, B., Dorion, C.S., Mukisa, H., Faskhoodi, M., Hakim, B., Garcia, G., Xu, W., Betancourt, S., Canas, J., Messonnier, T., Mullins, O., Integrated Rock and Fluid Workflow to Optimize Geomodeling and History Matching, SPE Annual Technical Conference and Exhibition, Dubai, UAW, September 2021., doi 10.2118/206299-MS

Logal, S.K., LaBarre, E., Dorion, C.S., Clarke, P.R., Jamaluddin, M.A., Hartley, A., 2020, Predicting Fluvial Reservoir Facies by Upscaling Seismic Inversion with 3D Geocellular Modeling: Pinedale Field Case Study; Unconventional Resources Technology Conference, doi 10.15530/urtec-2020-2123

Schukla, P.,Xu, L., Dorion, C.S., Paddock, D., Utech, R., Swager, L., Nikoleava, A., 2019, **Digital Solutions to Optimize Stacked Play Development in Delaware Basin- A Step Change in Multi-disciplinary Value Creation to a customer**, Schlumberger 2019 Reservoir Symposium.

Ma, Y.Z., Gomez, E., Phillips, D., Dorion, C., Moore, W.R. Simpson's Paradox in Evaluating and Developing Unconventional Resources. In Proceedings of the IAMG Annual Conference, State College, PA, USA,10–16 August 2019

Li, S., Zhang, Ye., Ma, Y.Z., Dorion, C.S., Daly, C., Zhang, T., 2018, **A comparative study of reservoir modeling techniques and their impact on predicted performance of fluvial-dominated deltaic reservoirs: Discussion**, AAPG Bulletin, v.102, no. 8, p. 1659-1663, doi 10.1306/0108181613516519

Notable Projects

- **Integrated 3D Geostatistical reservoir model construction and automation, Fivestones Acreage, Midland Basin, Tx.** In this project, I generated a layer cake Vo velocity model based on 18 tied wells and used the velocity model to domain convert seismic inversion attributes and interpretations to depth. I then built a deterministic model framework from the interpretations flexed to available well control and used the inversion data as a statistical driver for a hierarchal facies model. I used the facies to constrain the distribution of continuous rock properties and ultimately a Discrete Fracture Network Model. After model completion, 10 wells withheld by the Chief petrophysicist were used to blind test model predictability. Porosity was predicted with 85% accuracy, while Sw was predicted at 90% accuracy.
- **Structural Model generation of complex flower structure, Ca.** This strike/slip positive flower structure located on a fault restraining bend in the San Andreas fault zone contains over 50 vertically truncating reverse faults and 8 vertically stacked and heavily compartmentalized oil bearing zones. The client kindly supplied the dataset to test the capabilities of Petrel's Volume Based Modeling algorithm in development at the time. I digitized cross sections and gridded 35 horizons with well tops, and successfully created a structural model if the entire field. This was the first time in history this field had been modeled in one piece without omitting structure for simplicity.
- **Optimization of Stacked Play Development, Delaware Basin, Tx.** The goal of this project was to optimize well spacing, landing, and completion design for new development throughout a client's Delaware Basin assets in order to drill fewer wells faster and with less overlap in drainage area. I constructed a fully automated Living Earth Model (LEM) using depth converted seismic interpretation and inversion volumes tied to available wells. The static model properties were spun off to seven regional dynamic reservoir and geomechanical simulation grids. This project was a finalist for the Conrad Schlumberger Award for Technical Depth at the 2019 Reservoir Symposium.
- **Enterprise Data Migration and Software Deployment for midsize operator, Denver, CO.** One of our clients had a need to standardize all G&G staff on a single software platform. I managed the technical aspects of this several phase project, starting with a proof-of-concept pilot, Installing the central production database, migrating data, training of all geology, geophysics, and geotechnologist staff company wide, supporting staff through initial evaluation and adoption, and eventually handing off to in-house staff after successful transition. In all, I migrated around a terabyte of data and trained a staff of 40 geoscientists.

Professional & Civic Involvement

- **American Association of Petroleum Geologists** *Member; (2010-Present)*
- **American Institute of Professional Geologists** *Member; (2010-Present)*
- **Rocky Mountain Association of Geologists** *Member; (2010-Present)*
- **Colorado 14ers Initiative** *Peak Steward; (2010-Present)*
- **American Homebrewer's Association** *Member; (2012-Present)*

References Available upon request.

- **Community Shares of Colorado** *Charity Homebrewer; (2017-Present)*
- **Colorado Collaborate Foster Care Program** *Foster Dad; (2019-Present)*

References Available upon request.