PEIGNARD Ludovic 18, rue Roublot 94120 Fontenay-sous-Bois FRANCE

SENIOR GEOPHYSICIST

Date of Birth: April 7th 1982

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SKILLS WRAP-UP

QC and data standardization
Geopositioning
Seismic Acquisition & Processing
Seismic Interpretation
Seismic Reservoir Characterization

Borehole Seismic – VSP Electromagnetics Geostatistics Risks Analysis Project leadership

BIO

Ludovic Peignard began his career as an exploration geophysicist, involved in several Oil & Gas projects, covering various domains of geosciences.

While getting experienced in geosciences, feeling a lack of flexible and swift software solution in the Oil & Gas Industry, Ludovic has developed EarthQuick, a software to act as a companion for Geoscientists. The solution evolved rapidly and let now geoscientists performed usual tasks which are part of their redundant duties, covering a wide range of facilities, from geosciences data loading and interpretation to volumes assessment, passing by mCSEM feasibility studies. From 2016, EarthQuick has also turned to Near Surface issues, keeping the same motto: letting user get straight to the point through simple and intuitive workflows.

From 2013, Ludovic has become a geophysicist consultant, a technical software expert and an associate professor in Geophysics at different reference institutions (IFP School, IFP Training, École et Observatoire des Sciences de la Terre (EOST), Polytech Sorbonne (UPMC) and École Nationale Supérieure de Géologie (ENSG)).

Ludovic graduated M.Sc.'s from the EOST (France) in 2006 and from the IFP School in 2007, major Geophysics.

PROFESSIONAL EXPERIENCE

EARTHQUICK PROJECT MANAGER, GEOPHYSICS ADVISOR & INSTRUCTOR

EARTHQUICK

Since Oct. 2013

EarthQuick scientific & commercial development

Instructor in petroleum geophysics (Processing QC, Seismic Interpretation, Electromagnetics, ...)

- Associate teacher in Geophysics programs in M.Sc.'s with IFP School GOP and PDM cycles; Ecole et Observatoire des Sciences de la Terre (EOST); Polytech Sorbonne (UPMC); Ecole Nationale Supérieure de Géologie (ENSG).
- Training sessions for professionals.

EARTHQUICK - PONTS ET CHAUSSEES DE LUXEMBOURG

Since Jan. 2020

Geophysicist Advisor to plan 2D seismic acquisition in contemplation of a geothermal project.

- · Call for tender preparation;
- Acquisition design and processing follow-up;
- Seismic interpretation.

EXPLORATION GEOPHYSICIST

CVA ENGINEERING - PETROLEUM AGENCY OF SOUTH AFRICA

From May. 2020 to Jan. 2021

Basin and petroleum systems modelling.

Roles:

· Project leader

CVA ENGINEERING - NEPTUNE ENERGY

From Dec. 2019 to Feb. 2021

Structural interpretation over the Touat Core Area and definition of structural styles – Prospect evaluation – GWC contact review.

Roles:

Geophysicist - Seismic interpreter.

CV ASSOCIES - PETROCI

From Dec. 2018 to Jun. 2019

Seismic interpretation on CI-500 and CI-11 blocks in Ivory Coast. From kick-off meeting to reserves estimation – 1-month training of Petroici's employees (teaching Geophysics and managing other disciplines) – Project leading and client-contractor relationship management. Roles:

Project leader and principal geophysicist.

CV ASSOCIES – ENTREPRISE TUNISIENNE D'ACTIVITES PETROLIERES

From Mar. 2018 to Oct. 2018

Seismic interpretation for identification of Tectonic Domains and Structural Styles in the Tunisian Atlas from Case Studies of Producing Fields and Exploration Wells

Roles:

Principal geophysicist.

CV ASSOCIES – MINISTERE DE L'ENERGIE ET DU PETROLE DU NIGER

From Feb. 2017 to Jan. 2018

Audit and specifications writing for Archives and technical centers restoration in Direction Générale des Hydrocarbures.

Roles:

- · Backup schedule for geoscientific data base;
- Scaling of the IT infrastructure;
- Technical software specifications;
- Technical training program formulation;
- Recommendations for oil & gas potential enhancement.

CV ASSOCIES – TOTAL – TGSE (TOTAL GAS SHALE EUROPE)

From Apr. 2014 to Jan. 2015

UK (Basins Experience: Confidential)

Roles:

• Principal geophysicist for onshore UK (new opportunities and assets) for Shale Gas purposes.

CV ASSOCIES

Since Oct. 2013

Geophysicist advisor for engineering consultancy matters and project leader in Geosciences.

GDF SUEZ – NEW ASSETS DEVELOPMENT

From Sept. 2006 to Sept. 2013

Algeria (Basins Experience: Ahnet, Berkine, Sbaa, Reggane, Illizi).

Roles:

- Principal geophysicist on Touat permit (SBAA Basin), operated. In charge of Seismic interpretation, Wells proposals, zero-offsets, walkaways and walkarounds VSP (calls for tenders, technical programs design - acquisition and processing -, operations follow-up, processing), Geopositioning expertise, Rock physics modeling and elastic impedance inversion (Scope of work writing, call for tender, offers evaluation, study follow-up);
- Bid rounds evaluations from data rooms to risks analysis in Berkine, Reggane and Ahnet basins:
- Data standardization, Seismic interpretation, Time-to-Depth conversions.

Qatar (Blocks Experience: 4, A, B, C)

Roles:

- Principal geophysicist on Block 4, operated. In charge of Seismic interpretation, Geostatistics, Time-to-Depth conversions, zero-offset VSP follow-up from acquisition to processing, SRC through seismic attributes and spectral decomposition.
- Bid round and opportunity evaluation.

French Guyana (Block Experience: French Guyana (Offshore)).

Roles:

• CSEM Feasibility study, Acquisition survey design, Acquisition supervision as the Company representative onboard the acquisition vessel.

Mauritania, Egypt, Ivory Coast:

- Ivory Coast: Regional Geological study on offshore Ivory Coast basin.
- Mauritania: 3D seismic processing supervision on marine data.
- Egypt: 3D seismic processing supervision on marine data.

Miscellaneous duties

- Seismic Reservoir Characterization coordinator/advisor for the New Assets Department.
- Software platform benchmark for Time-to-Depth conversions uncertainties (HIIP, Petrel, UDOMoRe, Isatis).

EDUCATION

Sept. 2006 to Mar. 2008:

MSc in E&P Geophysics IFP School, Paris, France. Apprenticeship with Gaz de France.

Sept. 2003 to Aug. 2006:

MSc in Geophysics Ecole et Observatoire des Sciences de la Terre (EOST), Strasbourg, France.

PUBLICATIONS

- Mari, J.L., Peignard, L., Andréis, D., Girard, J.F. (2017). Electromagnetic methods in Geophysics [ebook]. Available at: http://books.ifpenergiesnouvelles.fr/ebooks/ifpen-electro/index.php. DOI: https://doi.org/10.2516/ifpen/2017001.
- Peignard, L. (2016). Signal processing for geologists and geophysicists Attributes [ebook]. Available at: http://books.ifpenergiesnouvelles.fr/ebooks/signal-processing/chap.php?id=10. DOI: https://doi.org/10.2516/ifpen/2011002.
- Meunier, R., Binet, H., Peignard, L. (2015, September). Local Geostatistical Filtering Using Seismic Attributes. Poster session presented at EAGE Petroleum Geostatistics 2015, Biarritz, France.

TRAINING

- Deep Learning with MATLAB by Mathworks online self-paced.
- Stratigraphic Traps Identification Workshop: Sequence Stratigraphic Concepts and Trap Styles in Clastic Systems by Nautilus World Instructor: George Bertram.
- Methods for Quantifying and Communicating Uncertainty in Depth Conversion and Volumetrics by Nautilus World Instructor: Ashley Francis.
- Geostatistics for Geophysicists by Geovariances Instructor: Matthieu Bourges.
- Depth Conversion Methods and Pitfalls by Nautilius World Instructor: Alan Atkinson.
- AVO Workshop by Hampson Russell. Instruction from GDFSUEZ London office.
- The Essentials of Rock Physics for Seismic Amplitude Interpretation by Nautilius World and Rock Physics Associates Instructor: John Chamberlain.
- Modern seismic imaging techniques: A masterclass in time and depth by Nautilius World Instructor: Etienne Robein.
- Seismic Interpretation of Structural Styles: A Workshop for Petroleum Geoscientists by Nautilius World (F160) Instructors: Mark Cooper and Marian Warren.
- Borehole Seismic by IFP Training Instructor: Serge Blanco.
- Vibroseis Acquisition and Processing a Half-Century Later: New Developments in Data Quality and Productivity. EAGE workshop.
- Reservoir geology field school in the depositional environments of the Aquitaine basin. Instructor: Hugues Fenies.
- BOSIET Falck Nutec Rotterdam.

LANGUAGES

French & English.

Computer science:

- Geosciences softwares: EarthQuick, Petrel, Charisma, Kingdom, Isatis, PaleoScan, GeoTeric, GeoX, ArcGlS, OpendTect, Hampson-Russell, SAAM, HIIP, Sismage.
- Operating systems: Linux, Mac OS, Unix, Windows.
- Programming: C, Matlab, Fortran, C#, .NET, java, php.

OTHER SKILLS

- Creator and Owner of EarthQuick (Web site: www.earth-quick.com). EarthQuick is a software solution which is aimed to be a "geoscientists companion", enabling quick assessment from seismic digitalization up to seismic interpretation and volumetrics, passing through well correlation, CRS conversion... User-friendliness, flexibility and mobility are strong key factors to drive EarthQuick development.
- Valid driving license.