

OOD ANALYTICS

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Lagos, Nigeria.

About

We are specialized in the development of machine learning and AI softwares and microservices for the geo-industry that aids companies, researchers to make insightful business decisions with data. We combine our domain expertise in geoscience with our software development specialties into providing state of the art geo-software solutions that aids your workflows and consequently gives you an edge over competitors.

Core Competencies

• Software Development • Machine learning and deep learning • Data Science & Analytics • Agile Development • Geoscience • Open Source • Capacity Building and Training • Content Creation & Technical Writing • Community Development

Clients

Earth Science Analytics, Athens, Greece. (February 2022 – December 2022)

Machine Learning/Backend Developer (February, 2022 – Present)

- Development of machine learning models for image classification, semantic segmentation and detection of rock cutting types from cutting images used in the training and automatic labeling (EarthVision) of over 700,000 cutting images in production.
- Build django restful APIs and machine learning backend for EarthVision; image classification, semantic segmentation and object detection.
- Research and implement state-of-the-art self supervised machine learning denoising of seismic images.
- Bugs and issues fixes
- Development of training modules, resources and presentations to demonstrate the ability of EarthNet and its modules to users and clients.
- In-house training of non-technical staff and stakeholders on machine learning use case, applications, and benefits.
- Worked closely and assisted the research team to achieve KPIs.
- Suggested state of the art data science and machine learning techniques best techniques for machine learning well logs interpretation in EarthNET.

dGB Earth Sciences, Enschede, Netherlands. (March 2021 – February 2022)

Data Scientist/Machine Learning Developer (November 2019 – December 2020)

- Build and integrate pytorch plugin for all machine learning workflows
- Develop machine learning workflows for 2D, 3D seismic and well log data interpretation includes; rock property prediction,
- ML seismic inversion, seismic bodies classification and segmentation
- Core contributor: <https://github.com/opendtect/dgbpy>
- Innovate machine/data approach solutions to well lithology problems
- Improve previous software machine learning workflows
- Create tutorial and open source technical contents for geoscience machine learning and python community

Machine Learning Engineer (Part-time), Milsat Technologies Limited, Abuja, Nigeria. (December 2020 – December 2021) [Remote]

- Developed and implemented a machine learning object detection model on a raspberry pi for the recognition of pests and intruders on a farm outpost. The setup was used in conjunction with an IoT device for real time monitoring of different farm posts for better security and agricultural produce yield.

Volunteer Experiences & Open Source Contribution

- Software Underground (open source community for geoscientists and tech enthusiasts) – Board member. (March, 2022 - Present)
- Author - petroeval (python software package for petrophysical analysis with machine learning support for lithology and lithofacies prediction) - (2020 till date)
- Open source contributor (2020 till date)
- Data Science Nigeria/Data Scientist Network - Technical Lead. (January, 2020 - January, 2021)
- Knowledge sharing sessions through multiple webinars (2021 till date)

Awards

- First place position (group): SEG NVIDIA seismic facies classification (2021)
- Second place award NAPE Annual International Conferences and Exhibitions: Convolutional Neural Networks for Salt Bodies Mapping using Machine Learning: A Case Study of the F3 Block, North Sea (2021)
- AAPG L. Austin Undergraduate Grant
- Top position for Steam Optimization Challenge using machine learning to optimize steam injection for enhanced oil and gas recovery (2021)
- First position prize of €2000 for 2020 FORCE Machine learning lithology prediction from well logs - developed the current state of the art model for lithofacies prediction on blind wells from the North Sea.
- Best poster award: NAPE Annual International Conferences and Exhibitions (2020) - Estimation of missing petrophysical data from well logs
- First position in in-house Data Science Nigeria (FUTA) machine learning hackathon: prediction of customer churn of a set of products from a supermarket (2020)

Publication & Speaking Engagements

- TRANSFORM 2021 - Big Data Lithology Prediction with Machine Learning (webinar)
- 4 days bootcamp for Nigerian oil and gas professionals on Python and machine learning applications in geoscience (Hands on)
- FORCE Machine learning symposium: 5 Stratified CV Fold + regularized gradient boosting approach to lithology prediction (winning strategy)
- How to prepare well logs to get optimal Machine Learning results (dGB Earth Sciences)
- Seismic Facies Prediction using Convolutional Neural Networks at Geo-Python Africa Week (2021)

Selected Trainings and Certifications

- The Rust Programming Language (2022)
- Django and django rest framework (2022)
- AWS Machine Learning Foundations - Udacity (2021)
- Complete Python Developer - Zero to Mastery (2020)
- Complete Machine Learning and Data Science Bootcamp - Zero to Mastery (2020)
- Introduction to Deep Learning with PyTorch - Udacity (2020)
- Principles of Machine Learning - Microsoft (2019)
- Power BI Analyst - Microsoft (2019)
- SQL for Data Analysis - Udacity (2019)

Technical Skills

- Programming languages and OS: Python, JavaScript (React), Rustlang, SQL, Bash, HTML5&CSS3, R, Linux, Windows.
- Data Science and Analysis: SQL, PowerBI, pandas, scikit-learn, numpy, matplotlib, seaborn, MS Excel
- Programming libraries and frameworks: Django, React, FastAPI, Flask, PyTorch, TensorFlow, PySpark etc.
- Databases: PostgreSQL, MySQL, Redis.
- Cloud, CMD & Containers: Docker, Bash
- Collaborating & Business Tools: Git & GitHub, Markdown, Tableau, Jira, PowerBI, MS Excel, PowerPoint, Canva, Slack, Microsoft Teams, Miro
- Others: Content creation and development, social media management and community management.