

# **Smart Thinking AI/ML Services**

Smart Thinking is a Saudi-based establishment specializing in training, engineering, and consultation, dedicated to delivering innovative solutions designed to meet the unique needs of our clients. Our services encompass a range of essential areas including accredited training, AI-driven software solutions, and advanced operational tools for the oil and gas industry.

### **AI-Driven Software Solutions for Enhanced Operations**

Smart Thinking leverages the power of Artificial Intelligence (AI) and Machine Learning (ML) to create sophisticated solutions that address complex challenges in petroleum engineering. Our offerings encompass advanced AI-driven capabilities such as data preprocessing, regression and classification analysis, forecasting, and model validation. Each AI-powered software tool is designed to optimize processes, enhance insights, and support efficient decision-making across operations.

#### **Our Suite of AI Solutions:**

- **ST-Drill**: Provides real-time monitoring and optimization for drilling operations by analyzing drilling parameters and maximizing the rate of penetration (ROP).
- ST-FormEval: Supports reservoir characterization, providing detailed analysis to inform reservoir management and production strategies.
- **ST-GeoMech**: Focuses on wellbore stability through geomechanical analysis, ensuring safe and effective drilling fluid design.
- **ST-Log**: Generates synthetic well logs, assisting in reservoir evaluation and optimization of drilling and production plans.
- **ST-PRO**: Optimizes production by analyzing operational data to enhance resource management and production efficiency.
- **ST-PVT**: Offers precise predictions of Pressure-Volume-Temperature (PVT) properties, aiding in effective production planning and recovery strategies.









## **Smart Solutions for Oil and Gas Operations**

Our AI-powered tools transform operational management in the oil and gas industry with real-time monitoring, predictive analytics, and advanced modeling for diverse applications.

### **Key Capabilities Include:**

- Real-Time Monitoring: Continuous monitoring of drilling operations, fluid rheology, and reservoir conditions, enabling immediate adjustments to optimize performance.
- Predictive Analytics: Proactively predicts critical operational factors, reducing downtime and enhancing drilling efficiency.
- Advanced Modeling: Supports reservoir characterization, synthetic well-log generation, and geomechanical analysis, improving resource management strategies.
- **Drilling Optimization**: Dynamically adjusts drilling parameters to maximize ROP and minimize non-productive time.
- Reservoir Evaluation: Utilizes synthetic logs and advanced data analysis to accurately model key reservoir properties.
- **Production Enhancement**: Monitors production processes to optimize artificial lift systems and predict PVT behavior, ensuring maximum output and cost efficiency.

By integrating these solutions, we empower your organization to make data-driven decisions, optimize processes, and maintain a competitive edge. Our AI technologies not only advance current operations but also establish a foundation for future improvements in exploration, drilling, and production.





