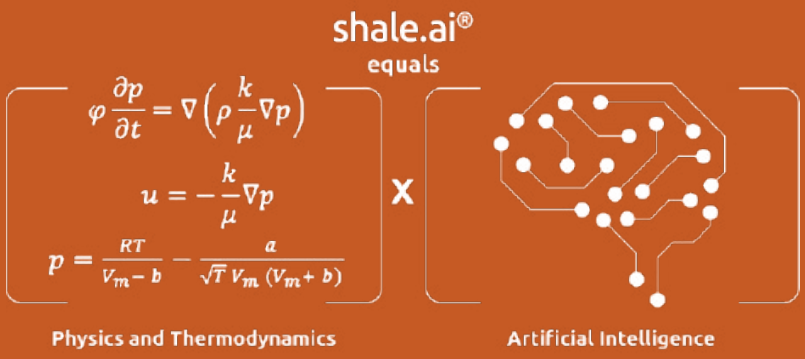
The fastest way to increase asset ROI

At the intersection of physics and augmented intelligence (AI), shale.ai® is a cloud-based application hub that helps operators optimize project economics and reduce their carbon footprint through a suite of seamless business applications.



Innovation by integration of technologies

- **shale.ai®** is designed for engineers and combines geoscience and engineering principles.
- **shale.ai®** connects to upstream and downstream applications. Its open architecture enables the integration of your own machine learning algorithms and models.

Disruptive solutions that revolutionize real-time decision-making and prediction capabilities, leading to faster ROI

Most advanced tools provided to subsurface teams for reservoir characterization and simulation are optimized for conventional reservoirs and not designed for the long horizontal wells and complex fracture networks required to produce from an unconventional resource.

shale.ai® seamlessly generates productivity correlations and bespoke predictive models for each well or shale asset.

Petroleum and reservoir engineers, geologists, economists, and investors have quick and easy access to these integrated prediction models and fast decision-making tools. The outcome is a better and leaner field development plan which continues to improve over time.

shale.ai® prediction models

shale.ai® provides a production profile prediction for each well and for the entire field, as well as a blind test over several quarters of production. Prediction of hypothetical new wells can also be carried out by combining an initial rate model to the rate decline model to predict their entire production profile. Our push-button workflow generates production profiles on demand, on a single-well basis (each well learns from itself), or on a multi-well basis (hundreds of wells learn from one another).

Models in minutes, predictions in seconds

Easily convert measurements to models within minutes. Use these models to run millions of scenarios thereby automating decision-making in order to identify the optimal production, drilling, and reservoir plans.

Production Optimization

Field Development	Reservoir	Geology
Primary Recovery Multi-Well Optimization Securing Incremental Reserves	Refracturing Candidates Artificial Lift Optimization	Workover Candidates
Infill Drilling Optimization Hydraulic Fracture Optimization Well Placement	Reserves Asset Ranking	AI-assisted Geological Model Update

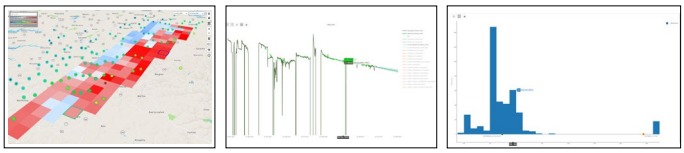
Our partners

Microsoft NVIDIA SDU

To learn more about our cloud-based **shale.ai®** product, please visit https://shale.ai, or send an email to software@maillance.com.

Case study: Securing incremental reserves

- Necessary data is collected, cleansed and contextualized.
- **shale.ai®** leverages this data for hydraulic fracturing and infill drilling strategy.
- Reservoir and completion engineers obtain fast, valuable insights to optimize hydraulic fracturing and infill drilling, thereby unlocking potential incremental production in the millions of barrels of oil equivalent.
- Typical confidence intervals for production profile prediction blind test:
  a. within 5% over 6 months,
  b. within 10% over 18 months.
- Delivery time is 1-4 weeks (other techniques take months).



Benefits

shale.ai® presents a modern solution for the management and optimization of production from shale assets - the majority of which lack a traditional simulation model. The platform offers shale operators a high-value complement to mitigate issues with incumbent fluid flow, financial and economic modeling techniques.

- Shorter decision cycles
- Higher recovery
- Reduced financial risk
- Reduced lift costs
- Leaner logistics
- Quantified Uncertainty

Product features

Plug and play
Enjoy frictionless onboarding that requires only domain knowledge of the user.

Fast
Build reproducible models in minutes; make predictions in fractions of seconds and evaluate 1000s of scenarios in hours.

Accurate
Update models effortlessly by learning from new streaming data; reduce interpretation biases by integrating raw measurements to guide predictions.

Scale in the cloud
Access your hub from anywhere and any device. Scale your runs in the cloud to support large datasets.

Data-driven
Utilize geological, completions and reservoir data to make informed decisions while we take care of measurement errors and data scarcity.