

12 AI Tools Every Oil & Gas Engineer Should Know

A practical starting list - you do not need all 12, just one

AI in oil & gas is not one tool, it is a toolbox spanning writing assistance, data analytics, reservoir simulation, and predictive maintenance. Here are 12 worth knowing about.

The 12 Tools

- **ChatGPT / Claude** - drafting reports, summarizing technical papers, brainstorming, and accelerating routine writing.
- **Microsoft Copilot** - AI assistance directly inside Excel, PowerPoint, and Outlook for day-to-day engineering workflows.
- **Power BI (with Copilot/AI visuals)** - natural-language querying of production and operations dashboards.
- **Seeq** - advanced analytics for time-series process data, popular in production and operations monitoring.
- **Cognite Data Fusion** - an industrial data platform used for contextualizing and applying AI models to asset data.
- **Novi Labs** - machine-learning-driven forecasting and well planning tools built specifically for unconventional reservoirs.
- **ResFrac** - physics-based frac/reservoir simulation increasingly paired with AI-assisted calibration workflows.
- **DataRobot** - an automated machine learning platform usable for production forecasting or failure prediction without deep coding skills.
- **GitHub Copilot** - an AI coding assistant useful for engineers building their own Python or data scripts.
- **Palantir Foundry** - a data integration and AI-driven decision platform used by several major operators for operations and supply chain.
- **IBM Maximo (with AI/APM features)** - predictive maintenance for rotating equipment and facilities.
- **Kaggle** - not a proprietary tool, but the best free resource for practicing real ML models on public energy and production datasets.

Your move: Do not try to learn all 12. Pick one tool and go hands-on with it this month. (Note: verify current features/pricing before relying on this list, as AI tools evolve quickly.)