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Redefining how Resource Geologists experience their work

Micromine Origin Grade Copilot is your cloud-based colleague who harnesses impactful neural networks to generate lightning-fast grade models with remarkable precision.

Your modelling copilot is always on hand to offer deep wisdom and expert guidance whenever needed, providing a sense of comfort and security.

It's revolutionising how resource geologists experience their work, delivering unmatched reliability in your models and estimates.

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What is a Neural Network? A neural network represents a computational model mirroring the interconnected nodes, or neurons, structured in layers akin to the human brain's neural architecture.

Through layers of interconnected nodes, it learns from provided examples, adjusting its internal parameters in a process known as training.

This adaptability enables it to capture subtle correlations within geological data, aiding in understanding complex structures and relationships within geological datasets.

## Why should Geologists trust Neural Networks?

Neural networks are sophisticated and indispensable AI tools in modern industries.

Widely adopted and proven effective across fields such as medicine, finance, manufacturing, and more, neural networks showcase unmatched versatility, optimising processes, driving innovation, and reshaping decision-making. Adapting their use for geology delivers equally impressive outcomes.

Neural networks can be trained on and learn from extensive geological data -

your data. They are proficient in uncovering patterns not immediately apparent to humans, and their ability to rapidly model complex relationships empowers geologists to swiftly highlight trends and relationships and test alternate scenarios.

The impact is providing validated predictions, enhancing data analysis and decision-making. However, their insights complement rather than replace your geological expertise; professional judgment, guiding the conclusive analysis, remains pivotal.
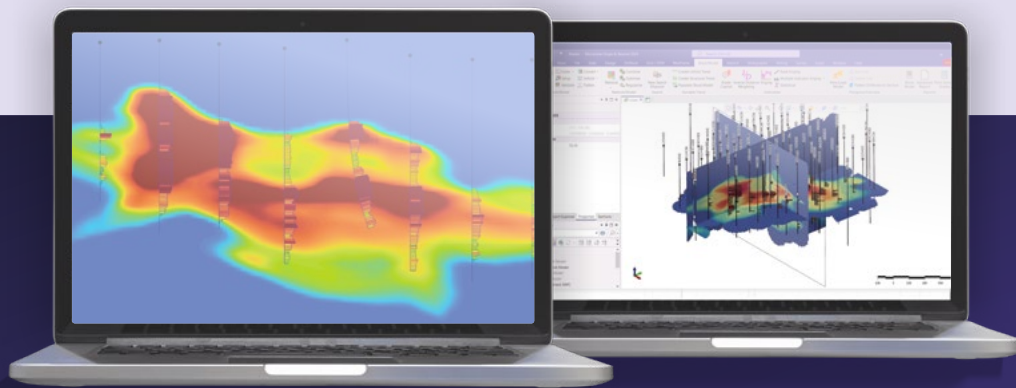
Meet your modelling copilot. Micromine Origin Grade Copilot is a cutting-edge offering for subscribers that enhances the resource estimation process.

Through integration with Micromine Nexus, our cloud-native data collaboration & sharing solution, this powerful tool can process any data that can be categorised or quantified.

It employs neural network modelling to swiftly and autonomously create comprehensive and robust models, enhancing the reliability of resource estimates.

Elevate your resource estimation workflow

Micromine Origin Grade Copilot enhances certainty in resource models by offering independent, actionable insights and guidance at three critical points in the resource estimate workflow.

How Micromine Origin Grade Copilot enhances resource estimation

- Highlight trends and relationships
- Gain valuable, independent insight
- Collaborate, challenge assertions
- Scenario testing and evaluation
- Evaluate model performance
- Robust, dependable estimates

1 At the beginning of the Exploratory Data Analysis (EDA) for guidance

Providing a reliable starting point, the grade copilot swiftly highlights trends and relationships, lighting your path and leading you toward an in-depth understanding of the nature of your deposit.

2 Towards the end of the EDA for validation

Offering an independent view of your interpretations, the grade copilot is like having a second set of expert eyes to review your work. It encourages collaboration, challenges assertions and allows you to test alternate geological scenarios, ensuring you've thoroughly explored every aspect of your EDA.

3 During the validation phase to help assess existing resource estimates

The grade copilot enables you to evaluate your model's performance without the need for a complete re-estimation, saving you time and effort.

Better yet, it is an independent perspective, meaning you can rest assured that your estimates are robust and dependable, meeting the high standards that our industry demands.