Quantum-Inspired Use Case

Achieve ROI Today While Preparing for Future Quantum Computers

Quantum computing promises enormous potential gains that could be disruptive and game-changing. Although we're not yet at the point of true advantage, waiting to enter the game could put your organization behind as the learning curve is steep. Don't wait for quantum computers to improve — quantum-inspired algorithms running on classical hardware provide: immediate ROI and performance gains, experience with quantum computing algorithms, and an onramp for your organization to become a leader in quantum computing tomorrow.

How We Can Help

- We achieve ROI with quantum-inspired techniques in areas like machine learning and combinatorial optimization.

- We help you identify real business problems that can be solved and determine value, assess risks, and take action to get real results today.

- We supply you with the code necessary to solve real business problems and provide support tailored to your needs.

- We empower your team to become experts through weekly knowledge transfers and workshops on quantum-inspired techniques and future applications on real quantum computers.

Dynamic Portfolio Optimization

- Maximize profits while minimizing risk on problems that standard methods often can't solve
- Encode real constraints such as asset holding time and desired percent return
- Achieve up to a 50% profit increase and a 33% volatility decrease

Credit Scoring

- Spot credit downgrades or entities whose solvency is at risk
- Gain better precision and fewer false positives than a standard, classical approach
- Provide "explainability" for credit decisions obtained

Choose the Right Use Case for You

Option Pricing

- Obtain hedging in incomplete fundamental markets using fewer parameters
- Achieve 3 times the speed and efficiency of standard methods
- Get results even in regimes where traditional Monte Carlo methods fail

Unique Use Cases

- Tackle optimization problems including supply chain and logistics
- Solve your unique business problem using the correct type of quantum-inspired approach
- Run code on the most advantageous hardware, including GPUs, TPUs, or digital annealers

INNOVATE. TRANSFORM. SUCCEED.

Quantum-Inspired Use Cases

Key Activities of this Offering

Use-Case Requirement Gathering:
We examine the type of business problem and determine what parts will lend themselves to a quantum-inspired approach. We issue a technical explanation of what will be involved and request specific details and data we will need to proceed.

Benchmarking:
We establish a performance baseline for the current classical approach.

Quantum-Inspired Iterations:
We begin with the basics of the selected quantum-inspired algorithm and iterate weekly on results, tweaking them to align with your current solution and find areas where performance can be improved. We also hold a workshop halfway through the project for knowledge transfer to your team to ensure expectations are met with the final production model.

Refining the Model:
We present near-final results to ensure we've met all expectations and then package and license the solution so your team may put it into production. We include a final workshop to ensure a smooth transfer. As an option, we offer to produce a paper describing the results of the approach and gained performance edge.

Explore Our Quantum Solutions

Post-Quantum Risk Assessment – Get started on the path to crypto agility, understand your critical data, and evaluate how your company will make the move to post-quantum cryptography.

Post-Quantum Readiness Workshop – Assess your readiness for the arrival of quantum computing and explore potential use cases for your industry.

Quantum Business Proof of Concept – Build the code necessary for portfolio optimization, fraud detection, and vehicle routing.

Let's Transform Together.

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