

Enabling Development Of Quantum Algorithms

Classiq brings the quantum software stack to a new level of abstraction, empowering quantum software developers and enabling the development of world-changing quantum algorithms and applications.



(THE PROBLEM)

Within the next few years, quantum computing is projected to make tectonic changes in huge industries.

To prepare for the quantum era, leading companies have already entered the field, trying to develop game-changing quantum algorithms for their needs.

The quantum software stack is still in its infancy, thus limiting the ability to create quantum algorithms and applications.

Quantum development environments (e.g Qiskit, Cirq, Q#, Forest, etc.) allow the design of quantum circuits either at the gate level or through modifications of a few existing building blocks.

OUR SOLUTION

Classiq builds the next layer of the quantum software stack, increasing the level of abstraction and allowing developers to implement their ideas and concepts without the need to design the specific gate level quantum circuit.

We follow much of the classical path in computer-aided design (CAD) technologies in order to enable practical and efficient development of quantum algorithms. Our approach is based on a high-level model of the intended quantum circuit. The model, ranging from fully abstract to highly detailed, is then used to automatically generate specific model compliant circuits. We also provide analysis aids that allow the user to analyze the circuit and improve the model iteratively.

Adaptation of this ground-breaking quantum algorithmic design framework will lead to the next leap in quantum algorithms development, increasing both creativeness and efficiency of the developer.

OUR PRODUCT



ABOUT CLASSIQ >

We are a young start-up, based in Israel, founded by highly experienced technical leaders. Our team combines unique expertise in quantum computing software and CAD technologies, enabling us to lead the way in computer-aided quantum circuit design. As we continue our development, we are happy to engage with potential partners and users.

(CONTACT US)





