

COMPANY PROFILE

Automatski is a full stack quantum computing vendor, it makes all the hardware, software, frameworks and offers quantum systems on a subscription over the cloud. It makes quantum annealers and gate based quantum computers. But unlike annealers from other vendors which offer 5000 or 8000 qubits, Automatski starts with 5000 qubits and goes upto a million qubits. And its annealers are fully connected. Automatski's gate based quantum computers go upto hundreds of logical qubits and are the most powerful in the world.

Automatski offers 2 SDKs for its annealers and quantum computers. The SDKs have bindings in 17 different programming languages unlike other vendors which usually support only python. They also include support for dozens of top quantum frameworks and contain 100's of examples. So you can implement quantum algorithms using any of those frameworks like Google Cirq, Diwave, Amazon Braket, IBM Qiskit etc. or you can implement natively without using any frameworks. And execute them over Automatski's backend quantum systems.

Automatski hence has native support for Quantum + AI + HPC hybrid workflows and plays very well alongside AI and Supercomputing applications. Automatski also works on Quantum AI, Quantum CFD, Quantum Chemistry/Materials, Drug Discovery, and Quantum Cryptography applications. In Quantum AI it is implementing Quantum Neural Networks in Pytorch, and in Quantum Machine Learning it is implementing a SciKit-Learn kind of package which can be used to transparently run Machine Learning applications over its quantum computers. Automatski has implemented Quantum Lattice Boltzmann Method which allows it to simulate multiphysics and multiscale CFD with trillions of mesh nodes in 3D with just 80-100 logical qubits. Quantum Chemistry and Materials are a low hanging fruit which can be solved with 100-300 Qubits.

Automatski has also implemented various cryptographic applications like RSA Factorization using Shors, AES S-Box, factorization using Annealers, Discrete Logarithms, Oded Regev's Algorithm. It holds the world record for the largest RSA number factorized using Shors algorithm on quantum computers.

Automatski has existed for 2+ decades as multiple legal entities in EU and India. And is completely owned by Resident Indian Citizens. It is completely bootstrapped and has not raised any funding in its core company. Though it will raise funding for its Quantum AI and Quantum CFD Ventures. It is head quartered in Bengaluru, India. And also offers consulting to its global clientele.

Automatski collaborates with dozens of universities for research. And owns The Millennium Institute which is into Quantum Computing Education & Training. It is setting up a 1000 crore 50 acre quantum center in Bengaluru and another 20 acre 1000 crore center in another state.

Let us know how can Automatski help you. info@automatski.com <https://automatski.com>

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