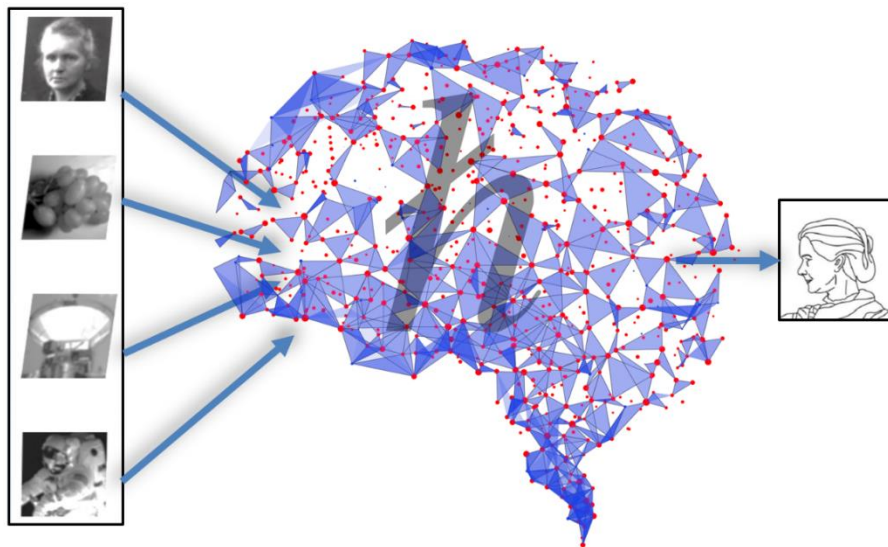


Quantum-Materials for Energy Efficient Neuromorphic-Computing (Q-MEEN-C)

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MISSION: To lay down the quantum-materials-based foundation for the development of an energy-efficient, fault-tolerant, computer that is inspired and works like a brain (“neuromorphic”).



A neuromorphic computer readily distills the image of a famous scientist from multiple inputs.

<http://efrc.ucsd.edu>

RESEARCH PLAN

Q-MEEN-C will breakaway from the conventional Turing-von Neumann paradigm by developing quantum materials for new types of bio-inspired (“neuromorphic”) devices. Their exotic properties will be harnessed to develop completely novel functionalities: artificial synapses, neurons, axons, and dendrites that can be used to construct machines with artificial intelligence.



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