Hochschule Karlsruhe
University of
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Ringvorlesung Quantencomputing

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Cost efficient quantum computing for AI applications

Quantum computers will revolutionise information processing, but they are very difficult to manufacture.

Depending on the quality, up to 10,000 physical qubits are required to create a logical qubit (i.e. a virtually error-free qubit), and all qubits must be entangled and accessible.

This is a long technical journey and only possible if applications are already being developed along the way.

Our goal is to develop QC hardware that already has an advantage over classical computers with just a few physical qubits. These are intended for use in AI in particular.

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