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Introducing Quantum Machine Learning: Where AI Meets Quantum Computing

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The already revolutionary capabilities of Artificial Intelligence (AI) are getting a massive upgrade by incorporating the potential of quantum computing. This merging of two powerful fields creates Quantum Machine Learning (QML), a new approach that can dramatically enhance problem-solving. This talk explores the intersection of these two technologies, reviewing where machine learning techniques are being adapted for use on quantum systems and what advantages these hybrid techniques bring to solve challenges in many fields. We categorize and analyze current research to identify the most common applications and the specific algorithms that researchers are using to achieve these advances across different areas.

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