

QuantumSolver AI: A Quantum Artificial Intelligence Module

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Abstract

This project introduces the development of a robust quantum artificial intelligence module [1,2], implemented as an extension of the open-source QuantumSolver quantum library [3]. The module enables the application of various quantum supervised learning models [4] to any classical dataset. Users are provided with a curated selection of pre-defined models and datasets, along with an intuitive tutorial for seamless integration into the platform. Established configurations are aggregated for default operations, while also allowing users the flexibility to adjust different parameters, providing a comprehensive research toolkit. Thus, the main implementation details, as well as the designed representations of the results and the conclusions drawn from the study conducted on the included models, are elaborated upon. Furthermore, special emphasis is placed on the generated graphics by the tool itself (Fig. 1).

References

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Figures

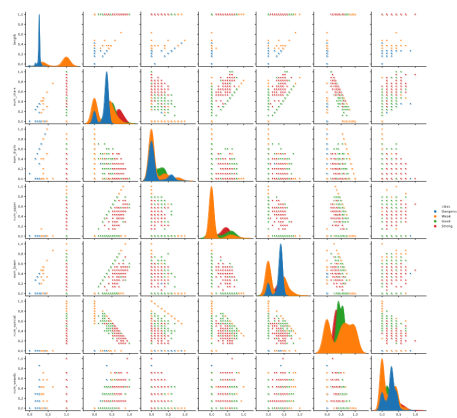


Figure 1: Password Strength dataset representation generated by QuantumSolver AI
