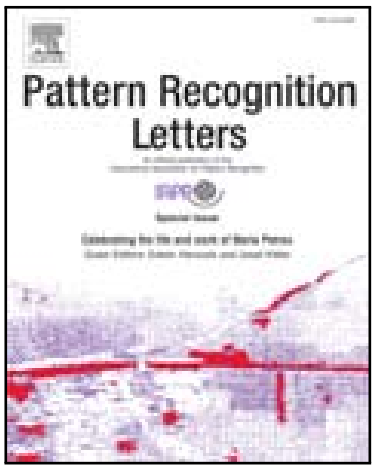

Quantum Kernels for Unattributed Graphs using Discrete-time Quantum Walks

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Highlights

- We propose a new family of quantum kernels using discrete-time quantum walks.
- We let a quantum walk evolve on each graph and compute a density matrix.
- We compute the quantum Jensen-Shannon divergence for graph density matrices.
- The kernel is defined as the negative exponential of the quantum JSD.
- We also compute the kernel between spanning trees on the orginal graphs.