Merkle Tree: Hierarchical Hash Structure

Level 3
Merkle Root

Level 2
Internal

Level 1
Leaf Hashes

Level 0
Data

ROOT

H12   H34

Tx1   Tx2   Tx3   Tx4

Tx1   Tx2   Tx3   Tx4

Merkle Proof for Tx3:
1. H(Tx4) - sibling
2. H12 - aunt
Verify: H(H12 || H(H(Tx3)||H(Tx4))) = Root