

# Understanding Blockchain Technology

## Blockchain Characteristics

- Decentralized – widely geographically dispersed, network of nodes.
- Secure – very hard to falsify records
- Reliable store of information
- Transparent – all data visible to all who can access
- Trust vs Trustless
- Permissioned vs Permissionless
- No need for middlemen
- No need for central authority

## Types of Blockchain

- Public
- Private
- Hybrid
- Consortium

## Blockchain Layers

- Hardware
- Data
- Network
- Consensus
- Application

## Blockchain Ecosystem

- Community of
  - founders,
  - developers,
  - miners,
  - stakers,
  - holders,
  - traders,
  - users.

## Blockchain Applications

- Finance
- Cryptocurrencies
- Healthcare
- Supply chains
- Voting systems
- Identity Verification