

Consistent Hashing - Learning Materials

Articles & Blogs

- [Consistent Hashing: Algorithmic Tradeoffs](#) - Deep dive into different consistent hashing algorithms and their trade-offs
- [Consistent Hashing in System Design](#) - Comprehensive guide with visual explanations
- [Amazon DynamoDB Paper](#) - Original Dynamo paper explaining consistent hashing in production
- [Jump Consistent Hash](#) - Google's paper on a fast, minimal memory consistent hash algorithm

Videos

- [Consistent Hashing | Algorithms You Should Know](#) - ByteByteGo's visual explanation
- [System Design: Consistent Hashing](#) - Gaurav Sen's detailed walkthrough
- [Distributed Systems: Consistent Hashing](#) - MIT lecture on consistent hashing fundamentals

Technical Documentation

- [Cassandra Architecture: Consistent Hashing](#) - How Cassandra implements consistent hashing
- [Redis Cluster Specification](#) - Redis's approach to hash slots and cluster sharding

Key Concepts to Explore

- Hash ring and key placement
- Virtual nodes (vnodes) for load balancing
- Replication with successor nodes

- Data migration during rebalancing
- Jump consistent hashing vs ring-based hashing