

## Real-time processing with Storm

### Course Outline:

- **Section 1: Introduction to Streaming Systems**

- Fast data
- Streaming architecture
- Lambda architecture
- Message queues
- Streaming processors

- **Section 2: Introduction to Storm**

- Architecture
- Sources / Sinks
- Tuples
- Spout
- Bolts
- Topologies

- **Section 3 : Programming With Storm**

- Storm Java API
- Bolt / Spout / Topology APIs
- Lab : Programming Storm

- **Section 4 : Topology Design**

- Mapping fields
- Parsing fields in Bolts
- Scalability and Parallelism
- Executors and Tasks

- Creating robust topologies
- **Section 5 : Logging & Metrics**
  - Logging in Storm application
  - Metrics : capturing and analyzing
- **Section 6 : Trident**
  - Intro to Trident
  - Trident operations
- **Section 7 : Designing and Tuning Storm Systems**
  - Kafka & Storm
  - Topology design
  - Tuning Storm systems