

## Solr for Developers

### Course Outline:

#### **I. Fundamentals**

- Solr Overview
- Installing and running Solr
- Adding content to Solr
- Reading a Solr XML response
- Changing parameters in the URL
- Using the browse interface
- Labs: install Solr, run queries

#### **II. Searching**

- Sorting results
- Query parsers
- More queries
- Hardwiring request parameters
- Adding fields to default search
- Faceting
- Result grouping
- Labs: advanced queries, experiment with faceted search

#### **III. Indexing**

- Adding your own content to Solr

- Deleting data from Solr
- Building a bookstore search
- Adding book data
- Exploring the book data
- Dedupe update processor
- Labs: indexing various document collections

## IV. Schema Updating

- Adding fields to the schema
- Analyzing text
- Labs: customize Solr schema

## V. Relevance

- Field weighting
- Phrase queries
- Function queries
- Fuzzier search
- Sounds-like
- Labs: implementing queries for relevance

## VI. Extended features

- More-like-this
- Geospatial
- Spell checking
- Suggestions

- Highlighting
- Pseudo-fields
- Pseudo-joins
- Multilanguage
- Labs: implementing spell checking and suggestions

## VII. Multicore

- Adding more kinds of data
- Labs: creating and administering cores

## VIII. SolrCloud

- Introduction
- How SolrCloud works
- Commit strategies
- ZooKeeper
- Managing Solr config files
- Labs: administer SolrCloud

## Developer sessions:

### IX. Developing with Solr API

- Talking to Solr through REST
- Configuration
- Indexing and searching
- Solr and Spring
- Labs: code to read and write Solr index, exercise in Spring with Solr

## X. Developing with Lucene API

- Building a Lucene index
- Searching, viewing, debugging
- Extracting text with Tika
- Scaling Lucene indices on clusters
- Lucene performance tuning
- Labs: coding with Lucene

## XI. Conclusion

- Other approaches to search
  - ElasticSearch
  - DataStax Enterprise: Solr+Cassandra
  - Cloudera Solr integration
  - Blur
- Future directions