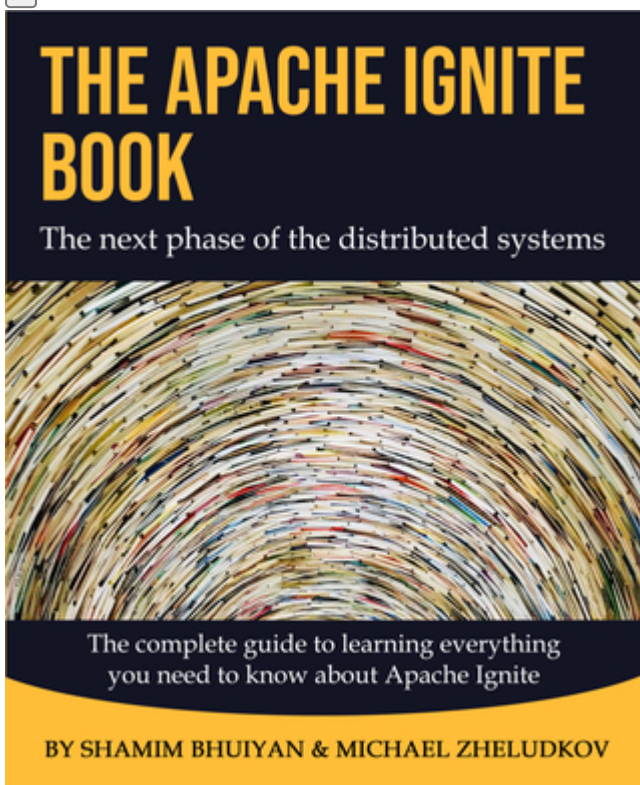


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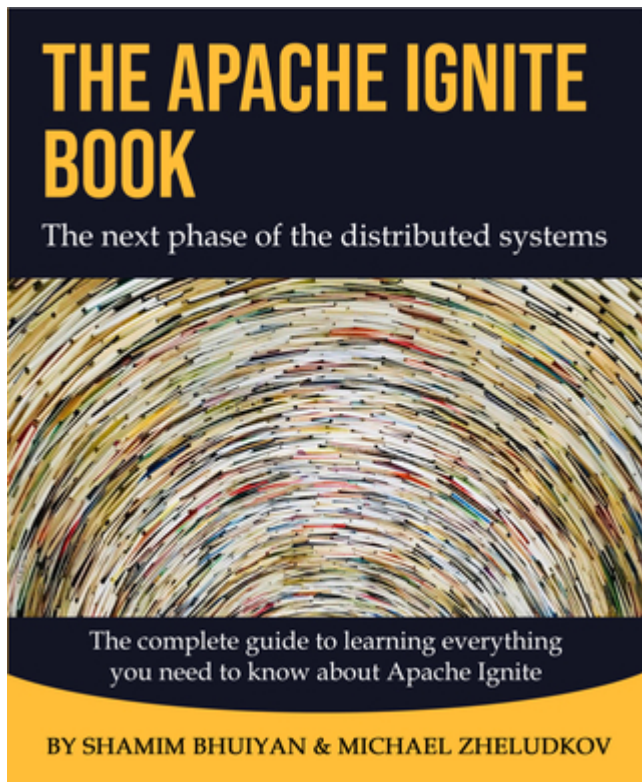
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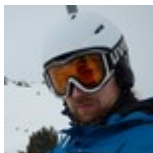
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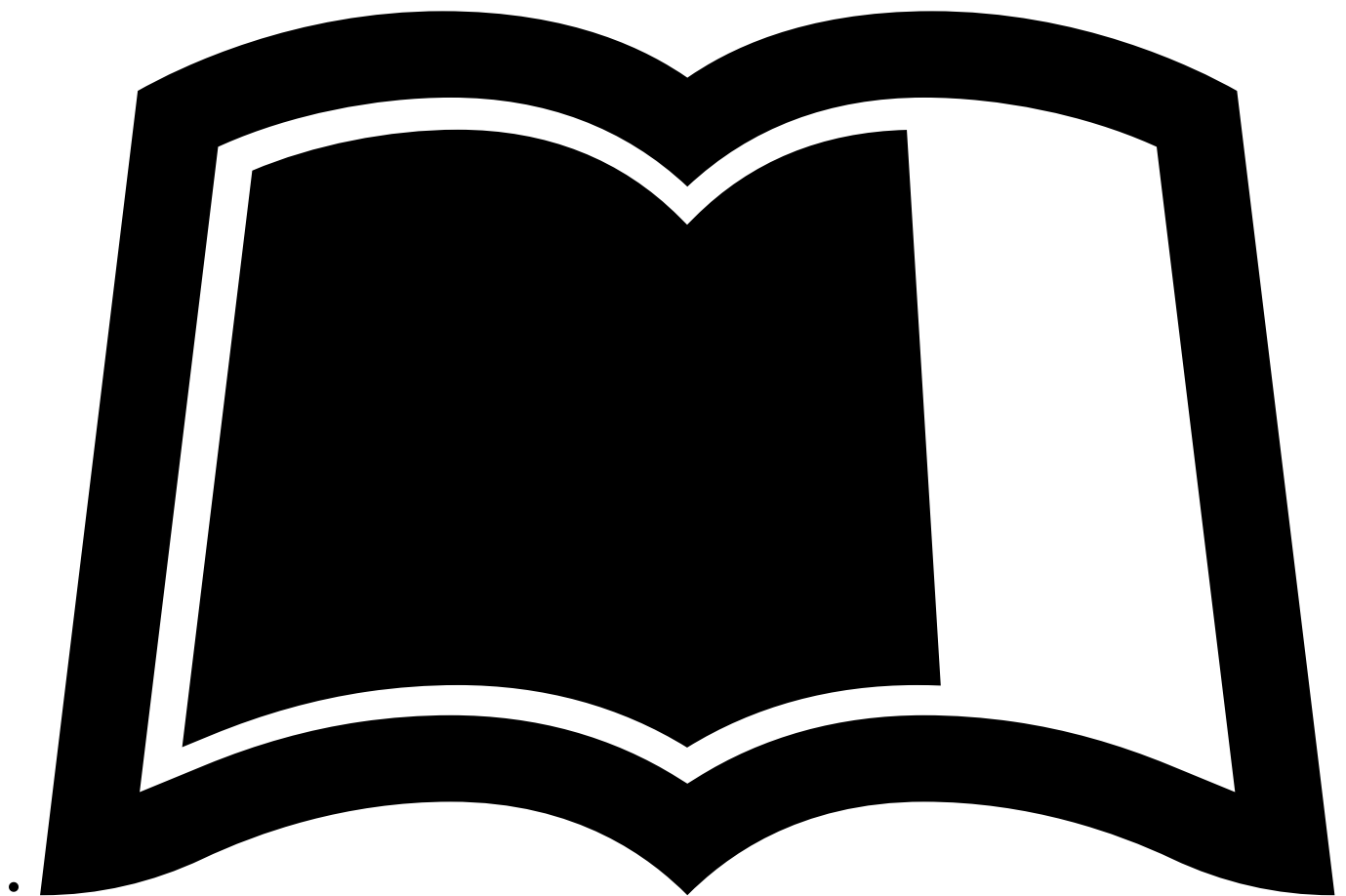
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## About the Book

This book is addressed to anyone interested in learning in-memory computing and distributed database. It is useful for developers and architects new to Apache Ignite as well as those who already use any other in-

memory databases and want to expand their knowledge.

The source code of the book is updated to Ignite version 2.14.0 and is available at [GitHub](#)

We upload a PDF file that has color images of the diagrams used in this book. You can download it here <https://bit.ly/36Mw0y9>

**What you will learn** (*please see the table of contents below for more details*):

1. Apache Ignite **architecture in depth** such as data distributing technics (DHT), Rendezvous hashing, durable memory architecture, various cluster topologies, Ignite native persistence, Baseline topology, and much more.
2. Apache Ignite proven **use cases** as a memory-centric distributed database, caching, and computing platforms.
3. Getting started with Apache Ignite by using different tools and technics.
4. **Caching strategies** by examples and how to use Apache Ignite for improving application performance including Hibernate L2 cache, MyBatis, Memoization, and Web session clustering.
5. Using Spring Data with Apache Ignite for developing **high-performance web applications**.
6. Ignite **query** (SQL, API, Text, and Scan queries) capabilities in depth.
7. Using **Spark RDD and Data frames** for improving performance on **processing fast data**.
8. Developing and executing **distributed computations** in a parallel fashion to gain high performance, low latency, and linear scalability.
9. Developing **distributed Microservices** in fault-tolerant fashion.
10. Processing events & streaming data for **IoT** projects, integrate Apache Ignite with other frameworks like **Kafka, Storm, Camel**, etc.
11. Real-time **data Replication** between Ignite clusters through Kafka.
12. Configuring, **management** and **monitoring** Ignite cluster with built-in and 3<sup>rd</sup> party tools.

For every topic, a complete application is delivered, which helps the audience to a quick start with the topic. Each chapter focuses on the complete implementation of a real-world scenario, the commonly occurring challenges in each scenario have also discussed, along with tips and tricks and best practices on how to overcome them.

### Readership:

The target audiences of this book will be an IT architect, team leader, or programmer with minimum programming knowledge. No excessive knowledge is required, though it would be good to be familiar with **Java, Spring framework**, and tools like **Maven**. The book is also useful for any reader, who already familiar with Oracle Coherence, Hazelcast, Infinispan, or Memcached.

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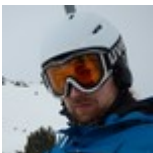
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## About the Authors



[Shamim Bhuiyan](#)

[Shamim Bhuiyan](#), currently working as an Enterprise architect, where he is responsible for designing and building out high scalable, high load middleware solutions. He has been in the IT field for over 16 years and specialized in Java and Data science. Also, he is a former SOA solution designer, speaker, and Big data evangelist. Actively participates in the development and designing high-performance software for IT, telecommunication and banking industry. In spare times, he usually writes the [blog #frommyworkshop](#) and shares ideas with others.



[Michael Zheludkov](#)

*Graduated from the Bauman Moscow State Technical University in 2002. Master's degree in computer science.*

Lecturer at BMSTU since 2013, delivering course “Parallel programming and distributive systems”

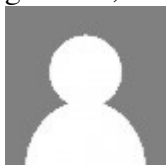
## Reader Testimonials



Edward Kuenen

Government, Netherlands

This is one of the very few good books on Apache Ignite. It covers the whole spectrum of Ignite. From use-cases and architecture till maintenance and code examples to get your hands dirty. If you want one book to get it all, this is it!



**Sadruddin Md, technology enthusiast**

This book has been very handy to me and the reading experience is fantastic. The balance of theory, coding, examples make reading the book very fun-filled and enlightening. You don't get bored! I definitely recommend this book to Ignite users; doesn't matter if you are a developer, support team member, architect or a solution designer. Everyone has got something or other to learn from this book.



**Manoj GT**

When it comes to Ignite, you have very less number of books to choose from, and by far this is the best book you will get. The Author has explained all the topics in a straightforward and understanding way with a working example for each. I have started with zero knowledge of Ignite, and now I'm able to build many working projects using Ignite due to the learning I got from this book. Big thanks to the author for writing this excellent book.

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