



# Scala High Performance Programming

*Vincent Theron, Michael Diamant*

Download now

[Click here](#) if your download doesn't start automatically

# Scala High Performance Programming

*Vincent Theron, Michael Diamant*

**Scala High Performance Programming** Vincent Theron, Michael Diamant

## Key Features

- Get the first book to explore Scala performance techniques in depth!
- Real-world inspired use cases illustrate and support the techniques studied and the language features
- This book is written by Vincent Theron and Michael Diamant, software engineers with several years of experience in the high-frequency trading and programmatic advertising industries

## Book Description

Scala is a statically and strongly typed language that blends functional and object-oriented paradigms. It has experienced growing popularity as an appealing and pragmatic choice to write production-ready software in the functional paradigm. Scala and the functional programming paradigm enable you to solve problems with less code and lower maintenance costs than the alternatives. However, these gains can come at the cost of performance if you are not careful.

Scala High Performance Programming arms you with the knowledge you need to create performant Scala applications. Starting with the basics of understanding how to define performance, we explore Scala's language features and functional programming techniques while keeping a close eye on performance throughout all the topics.

We introduce you as the newest software engineer at a fictitious financial trading company, named MV Trading. As you learn new techniques and approaches to reduce latency and improve throughput, you'll apply them to MV Trading's business problems. By the end of the book, you will be well prepared to write production-ready, performant Scala software using the functional paradigm to solve real-world problems.

## What you will learn

- Analyze the performance of JVM applications by developing JMH benchmarks and profiling with Flight Recorder
- Discover use cases and performance tradeoffs of Scala language features, and eager and lazy collections
- Explore event sourcing to improve performance while working with stream processing pipelines
- Dive into asynchronous programming to extract performance on multicore systems using Scala Future and Scalaz Task
- Design distributed systems with conflict-free replicated data types (CRDTs) to take advantage of eventual consistency without synchronization
- Understand the impact of queues on system performance and apply the Free monad to build systems robust to high levels of throughput

## About the Author

**Vincent Theron** is a professional software engineer with 9 years of experience. He discovered Scala 6 years ago and uses it to build highly scalable and reliable applications. He designs software to solve business problems in various industries, including online gambling, financial trading, and, most recently, advertising. He earned a master's degree in computer science and engineering from Universite Paris-Est Marne-la-Vallee.

Vincent lives in the Boston area with his wife, his son, and two furry cats.

**Michael Diamant** is a professional software engineer and functional programming enthusiast. He began his career in 2009 focused on Java and the object-oriented programming paradigm. After learning about Scala in 2011, he has focused on using Scala and the functional programming paradigm to build software systems in the financial trading and advertising domains. Michael is a graduate of Worcester Polytechnic Institute and lives in the Boston area.

## Table of Contents

1. The Road to Performance
2. Measuring Performance on the JVM
3. Unleashing Scala Performance
4. Exploring the Collection API
5. Lazy Collections and Event Sourcing
6. Concurrency in Scala
7. Architecting for Performance

 [Download Scala High Performance Programming ...pdf](#)

 [Read Online Scala High Performance Programming ...pdf](#)

## **Download and Read Free Online Scala High Performance Programming Vincent Theron, Michael Diamant**

---

### **From reader reviews:**

#### **Robert Sanders:**

This Scala High Performance Programming book is not ordinary book, you have it then the world is in your hands. The benefit you will get by reading this book is usually information inside this publication incredible fresh, you will get information which is getting deeper a person read a lot of information you will get. This particular Scala High Performance Programming without we recognize teach the one who examining it become critical in imagining and analyzing. Don't end up being worry Scala High Performance Programming can bring once you are and not make your tote space or bookshelves' turn into full because you can have it in your lovely laptop even cellphone. This Scala High Performance Programming having fine arrangement in word and layout, so you will not truly feel uninterested in reading.

#### **Julian Eaton:**

Reading a book for being new life style in this calendar year; every people loves to learn a book. When you study a book you can get a lots of benefit. When you read publications, you can improve your knowledge, mainly because book has a lot of information upon it. The information that you will get depend on what kinds of book that you have read. If you need to get information about your study, you can read education books, but if you want to entertain yourself look for a fiction books, these kinds of us novel, comics, in addition to soon. The Scala High Performance Programming offer you a new experience in examining a book.

#### **Joan Ortega:**

That book can make you to feel relax. That book Scala High Performance Programming was colorful and of course has pictures on the website. As we know that book Scala High Performance Programming has many kinds or type. Start from kids until adolescents. For example Naruto or Investigator Conan you can read and believe you are the character on there. Therefore , not at all of book are generally make you bored, any it makes you feel happy, fun and unwind. Try to choose the best book for yourself and try to like reading that.

#### **Alva Stephenson:**

What is your hobby? Have you heard which question when you got students? We believe that that issue was given by teacher on their students. Many kinds of hobby, Every individual has different hobby. Therefore you know that little person including reading or as reading become their hobby. You need to understand that reading is very important along with book as to be the matter. Book is important thing to incorporate you knowledge, except your own personal teacher or lecturer. You discover good news or update with regards to something by book. Different categories of books that can you go onto be your object. One of them is niagra Scala High Performance Programming.

**Download and Read Online Scala High Performance Programming  
Vincent Theron, Michael Diamant #QAJ97IXP1FS**

## **Read Scala High Performance Programming by Vincent Theron, Michael Diamant for online ebook**

Scala High Performance Programming by Vincent Theron, Michael Diamant Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Scala High Performance Programming by Vincent Theron, Michael Diamant books to read online.

### **Online Scala High Performance Programming by Vincent Theron, Michael Diamant ebook PDF download**

#### **Scala High Performance Programming by Vincent Theron, Michael Diamant Doc**

**Scala High Performance Programming by Vincent Theron, Michael Diamant Mobipocket**

**Scala High Performance Programming by Vincent Theron, Michael Diamant EPub**