



Ebook Directory
the best source of ebook

The book was found

Cloud Computing For Science And Engineering (Scientific And Engineering Computation)



Synopsis

The emergence of powerful, always-on cloud utilities has transformed how consumers interact with information technology, enabling video streaming, intelligent personal assistants, and the sharing of content. Businesses, too, have benefited from the cloud, outsourcing much of their information technology to cloud services. Science, however, has not fully exploited the advantages of the cloud. Could scientific discovery be accelerated if mundane chores were automated and outsourced to the cloud? Leading computer scientists Ian Foster and Dennis Gannon argue that it can, and in this book offer a guide to cloud computing for students, scientists, and engineers, with advice and many hands-on examples. The book surveys the technology that underpins the cloud, new approaches to technical problems enabled by the cloud, and the concepts required to integrate cloud services into scientific work. It covers managing data in the cloud, and how to program these services; computing in the cloud, from deploying single virtual machines or containers to supporting basic interactive science experiments to gathering clusters of machines to do data analytics; using the cloud as a platform for automating analysis procedures, machine learning, and analyzing streaming data; building your own cloud with open source software; and cloud security. The book is accompanied by a website, Cloud4SciEng.org, that provides a variety of supplementary material, including exercises, lecture slides, and other resources helpful to readers and instructors.

Book Information

Series: Scientific and Engineering Computation

Hardcover: 392 pages

Publisher: The MIT Press (September 29, 2017)

Language: English

ISBN-10: 0262037246

ISBN-13: 978-0262037242

Product Dimensions: 7 x 1.1 x 9 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,475,896 in Books (See Top 100 in Books) #39 in [Books > Engineering & Transportation > Engineering > Reference > Research](#) #451 in [Books > Computers & Technology > Networking & Cloud Computing > Cloud Computing](#) #1127 in [Books > Science & Math > Experiments, Instruments & Measurement > Methodology & Statistics](#)

Customer Reviews

This book helps make the cloud computing ecosystem comprehensible for scientist and student alike. Foster and Gannon provide an introduction to concepts, an explanation of systems, clean code examples in Python, and even downloadable Jupyter notebooks. Sign me up! (Simson L. Garfinkel, Cloud Computing Instructor; author of Architects of the Information Society) Foster and Gannon have written the definitive guide to cloud computing tools and techniques for data analytics, filled with practical tips and working examples. (Dan Reed, Vice President for Research and Economic Development, University of Iowa) Cloud computing has changed the corporate world dramatically in a few short years and is now about to play a major role in scientific and engineering applications. This very timely book by Foster and Gannon is both a comprehensive overview and a practical guide to the services offered by the three major public cloud providers, , Google, and Microsoft. It will be an invaluable resource for scientists and engineers in both industry and academia. (Tony Hey, Chief Data Scientist, Science and Technology Facilities, Rutherford Appleton Lab)

Ian Foster is the Arthur Holly Compton Distinguished Service Professor of Computer Science at the University of Chicago and Distinguished Fellow at Argonne National Laboratory. Dennis B. Gannon is Emeritus Professor of Computer Science at Indiana University Bloomington.

[Download to continue reading...](#)

Cloud Computing for Science and Engineering (Scientific and Engineering Computation) The Graphic Designer's Digital Toolkit: A Project-Based Introduction to Adobe Photoshop Creative Cloud, Illustrator Creative Cloud & InDesign Creative Cloud (Stay Current with Adobe Creative Cloud) Scientific Computing with MATLAB and Octave (Texts in Computational Science and Engineering) Adobe Photoshop Creative Cloud Revealed (Stay Current with Adobe Creative Cloud) Adobe Photoshop Creative Cloud: Comprehensive (Stay Current with Adobe Creative Cloud) Adobe Illustrator Creative Cloud Revealed (Stay Current with Adobe Creative Cloud) Adobe InDesign Creative Cloud Revealed (Stay Current with Adobe Creative Cloud) The Tech Contracts Handbook: Cloud Computing Agreements, Software Licenses, and Other IT Contracts for Lawyers and Businesspeople Cloud Computing and Electronic Discovery (Wiley CIO) Cloud Computing for Machine Learning and Cognitive Applications (MIT Press) Cloud Computing: The MIT Press Essential Knowledge Series Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing (History of Computing) Biomedical Statistics with Computing (Medical Computing Series) Elementary Linear Programming with Applications, Second Edition (Computer Science & Scientific Computing Series) The Lattice Boltzmann Equation for Fluid

Dynamics and Beyond (Numerical Mathematics and Scientific Computation) Introduction to Linear Optimization (Athena Scientific Series in Optimization and Neural Computation, 6) Numerical Analysis and Scientific Computation Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering (Engineering Materials and Processes) A First Course in Scientific Computing: Symbolic, Graphic, and Numeric Modeling Using Maple, Java, Mathematica, and Fortran90 by Rubin H. Landau (2005-05-01) Introduction to Scientific and Technical Computing

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)