



Transitions and Trees: An Introduction to Structural Operational Semantics

By Hans Hüttel

Download now

Read Online ➔

Transitions and Trees: An Introduction to Structural Operational Semantics

By Hans Hüttel

Structural operational semantics is a simple, yet powerful mathematical theory for describing the behaviour of programs in an implementation-independent manner. This book provides a self-contained introduction to structural operational semantics, featuring semantic definitions using big-step and small-step semantics of many standard programming language constructs, including control structures, structured declarations and objects, parameter mechanisms and procedural abstraction, concurrency, nondeterminism and the features of functional programming languages. Along the way, the text introduces and applies the relevant proof techniques, including forms of induction and notions of semantic equivalence (including bisimilarity). Thoroughly class-tested, this book has evolved from lecture notes used by the author over a 10-year period at Aalborg University to teach undergraduate and graduate students. The result is a thorough introduction that makes the subject clear to students and computing professionals without sacrificing its rigour. No experience with any specific programming language is required.

↓ [Download Transitions and Trees: An Introduction to Structur ...pdf](#)

📖 [Read Online Transitions and Trees: An Introduction to Struct ...pdf](#)

Transitions and Trees: An Introduction to Structural Operational Semantics

By Hans Hüttel

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel

Structural operational semantics is a simple, yet powerful mathematical theory for describing the behaviour of programs in an implementation-independent manner. This book provides a self-contained introduction to structural operational semantics, featuring semantic definitions using big-step and small-step semantics of many standard programming language constructs, including control structures, structured declarations and objects, parameter mechanisms and procedural abstraction, concurrency, nondeterminism and the features of functional programming languages. Along the way, the text introduces and applies the relevant proof techniques, including forms of induction and notions of semantic equivalence (including bisimilarity). Thoroughly class-tested, this book has evolved from lecture notes used by the author over a 10-year period at Aalborg University to teach undergraduate and graduate students. The result is a thorough introduction that makes the subject clear to students and computing professionals without sacrificing its rigour. No experience with any specific programming language is required.

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel

Bibliography

- Sales Rank: #3006092 in Books
- Published on: 2010-06-07
- Released on: 2010-04-29
- Original language: English
- Number of items: 1
- Dimensions: 9.72" h x .59" w x 6.85" l, 1.14 pounds
- Binding: Paperback
- 290 pages

 [Download Transitions and Trees: An Introduction to Structur ...pdf](#)

 [Read Online Transitions and Trees: An Introduction to Struct ...pdf](#)

Download and Read Free Online Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel

Editorial Review

Review

"Each chapter of the book contains various examples and problems, making it very suitable for teaching purposes. There are more than enough bibliographical directions for starting a thorough study of any of the presented topics. The book does not limit itself to structural operational semantics; it provides introductory information on several related topics. All of these aspects make the book a well-rounded presentation on the subject. The book can be successfully used by students, professionals, and researchers as a good introduction to the semantics of programming languages that will help them describe and reason about the behavior of programs."

G. Ciobanu, Computing Reviews

"Transitions and Trees is a detailed, rigorous, and thorough textbook on structural operational semantics on an advanced undergraduate level. The book's strength is the comprehensive coverage of many aspects of structural operational semantics. Transitions and Trees is generally well written and the large number of examples and interspersed exercises help in understanding the material."

Stephan Falke for SIGACT News

About the Author

Hans Hüttel is Associate Professor in the Department of Computer Science at Aalborg University, Denmark.

Users Review

From reader reviews:

Joseph Lewis:

What do you think about book? It is just for students because they are still students or this for all people in the world, the particular best subject for that? Merely you can be answered for that query above. Every person has distinct personality and hobby for each and every other. Don't to be pushed someone or something that they don't want do that. You must know how great and also important the book Transitions and Trees: An Introduction to Structural Operational Semantics. All type of book can you see on many options. You can look for the internet methods or other social media.

James Edgar:

Here thing why that Transitions and Trees: An Introduction to Structural Operational Semantics are different and dependable to be yours. First of all studying a book is good nonetheless it depends in the content than it which is the content is as delightful as food or not. Transitions and Trees: An Introduction to Structural Operational Semantics giving you information deeper and in different ways, you can find any e-book out there but there is no reserve that similar with Transitions and Trees: An Introduction to Structural Operational Semantics. It gives you thrill studying journey, its open up your own eyes about the thing that happened in the world which is probably can be happened around you. You can actually bring everywhere like in playground, café, or even in your approach home by train. When you are having difficulties in bringing the branded book maybe the form of Transitions and Trees: An Introduction to Structural

Operational Semantics in e-book can be your alternate.

Gerald Reed:

Spent a free time for you to be fun activity to complete! A lot of people spent their down time with their family, or their own friends. Usually they doing activity like watching television, going to beach, or picnic inside park. They actually doing same every week. Do you feel it? Will you something different to fill your personal free time/ holiday? Could be reading a book might be option to fill your free of charge time/ holiday. The first thing that you'll ask may be what kinds of publication that you should read. If you want to consider look for book, may be the book untitled Transitions and Trees: An Introduction to Structural Operational Semantics can be fine book to read. May be it might be best activity to you.

John Hicks:

Don't be worry if you are afraid that this book will probably filled the space in your house, you will get it in e-book way, more simple and reachable. This kind of Transitions and Trees: An Introduction to Structural Operational Semantics can give you a lot of close friends because by you investigating this one book you have point that they don't and make an individual more like an interesting person. This particular book can be one of a step for you to get success. This reserve offer you information that might be your friend doesn't know, by knowing more than various other make you to be great individuals. So , why hesitate? We should have Transitions and Trees: An Introduction to Structural Operational Semantics.

**Download and Read Online Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel
#HQ8KPB970D5**

Read Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel for online ebook

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel 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 Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel books to read online.

Online Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel ebook PDF download

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel Doc

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel Mobipocket

Transitions and Trees: An Introduction to Structural Operational Semantics By Hans Hüttel EPub