**Joakim Sundnes** 

# Introduction to Scientific Programming with Python

simula



## Simula SpringerBriefs on Computing

### Volume 6

### **Editor-in-Chief**

Aslak Tveito, Fornebu, Norway

### **Series Editors**

Are Magnus Bruaset, Fornebu, Norway Kimberly Claffy, San Diego, USA Magne Jørgensen, Fornebu, Norway Olav Lysne, Fornebu, Norway Andrew McCulloch, La Jolla, USA Fabian Theis, Neuherberg, Germany Karen Willcox, Cambridge, USA Andreas Zeller, Saarbrücken, Germany Springer and Simula have launched a new book series, *Simula SpringerBriefs on Computing*, which aims to provide introductions to select research in computing. The series presents both a state-of-the-art disciplinary overview and raises essential critical questions in the field. Published by SpringerOpen, all *Simula SpringerBriefs on Computing* are open access, allowing for faster sharing and wider dissemination of knowledge.

Simula Research Laboratory is a leading Norwegian research organization which specializes in computing. The book series will provide introductory volumes on the main topics within Simula's expertise, including communications technology, software engineering and scientific computing.

By publishing the *Simula SpringerBriefs on Computing*, Simula Research Laboratory acts on its mandate of emphasizing research education. Books in this series are published only by invitation from a member of the editorial board.

More information about this series at http://www.springer.com/series/13548

Joakim Sundnes

Introduction to Scientific Programming with Python





Joakim Sundnes Simula Research Laboratory Lysaker, Norway



Simula SpringerBriefs on Computing ISBN 978-3-030-50355-0 ISBN 978-3-030-50356-7 (eBook) https://doi.org/10.1007/978-3-030-50356-7

Mathematics Subject Classification (2010): 65D15, 65D25, 65D30, 68-01, 68N01, 68N19, 97-04

© The Editor(s) (if applicable) and the Author(s) 2020. This book is an open access publication.

**Open Access** This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

# Click here to download full PDF material