Scientific and Symbolic Computing Software

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This is a Quarto book.

To learn more about Quarto books visit https://quarto.org/docs/books.

1 Reading List

1.1 Matlab

- Matlab - A Practical Introduction. Attaway
- An Introduction to Programming and Numerical Methods in Matlab. Otto
- Learning Matlab - a Problem-solving Approach. Gardner
- Scientific Computing with Matlab and Octave. Quarteroni

1.2 Python

- Learning Scientific Programming with Python. Hill
- Introduction to Computation and Programming Using Python. John Guttag
- Intro to Python for Computer Science and Data Science. Deitel
- A Tour of Data Science - Learn Python and R in Parallel. Zhang

1.3 Mathematica

- Hands-on Start to Wolfam Mathematica and Programming with the Wolfram Language. Hostings et al
- An Elementary Introduction to the Wolfram Language. Wolfram
- Programming with Mathematica - An Introduction. Wellin
- Mathematica: A Problem-Centered Approach. Hazrat
- Mathematica Navigator. Mathematics, Statistics, and Graphics. Ruskeepaa

1.4 R

- R as a Language - Aphalo
- R and Matlab. Hiebeler
- Introduction to Probability with R. Baclawski
- Probability with Applications and R. Wagaman
- Probability with R - An Introduction with Computer Science Applications - Horgan

- Discovering Statistics Using R. Field
- Probability and Statistics with R for Engineers. Akritas
- Modern Data Science with R. Baumer

1.5 Sage

- Computational Math with Sage. Zimmerman et al
- Number Theory in Context and Interactive. Crisman
- Abstract Algebra - An Interactive Approach. Paulsen
- Concrete Algebra - With a View Toward Abstract Algebra. McKay