# Literature and Resources

## Good books and resources to read

This section provides a curated list of books and resources to enhance your understanding of mathematical Modelling, Julia programming and related topics. Each recommendation includes a brief description to help you choose the most suitable resources for you.

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## Julia

### Books

- Lauwens, B., & Downey, A. B. (2019). Think Julia: How to think like a computer scientist (First edition). O'Reilly®. Link to the free book website.
  - This book is great for beginners and covers Julia programming in a comprehensive manner.
- Kwon, C. (2019). Julia programming for operations research (Second edition). Changhyun Kwon. Link to the free book website.
  - This book is a fantastic ressource for students interested in Julia and Operations Research and covers a variety of topics.

### Resources

- Julia Documentation
  - The official Julia documentation is an good starting point to understand the language's features and syntax.
- JuMP Documentation
  - The official documentation of JuMP is a great resource for understanding optimization modeling in Julia, covering everything from simple linear models to advanced nonlinear and mixed-integer problems.

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## General

### Books

- Wilke, C. (2019). Fundamentals of data visualization: A primer on making informative and compelling figures (First edition). O'Reilly Media.
  - A book that is highly recommended to understand the principles of data visualization and how to create effective visualizations.
  - Link to the free book website
- Thomas, D., & Hunt, A. (2019). The pragmatic programmer, 20th anniversary edition: Journey to mastery (Second edition). Addison-Wesley.

- A fantasticbook to understand the principles of software development and how to create effective software.

### Resources

- Quarto
  - A static website generator that is very powerful and flexible. Used to create the slides and the website for the course.
- Cursor
  - A code editor based on VS Code that is very powerful and flexible. It uses AI to help you write code.
- Jupyter
  - A web application that allows you to create and share documents that contain code, equations, visualizations and text. It is very popular in the field of data science and academia and also part of Quarto.
- Advent of Code
  - A wonderful website with daily challenges during the christmas time. Highly recommended to playfully improve your skills.
- Github
  - The largest provider for git repositories owned by Microsoft. A lot of open source projects are hosted here and you can read the code.
- Codewars
  - A platform to improve your coding skills by solving challenges. You can compete with others, see how other people solved the challenges and read and learn from the code.
- Daily Dose of Data Science
  - A website and a newsletter with lots of easy-to-digest resources to improve your skills in Data Science.

## Bibliography