

Course.jl

Introduction

- ▶ What is Julia?
- ▶ Why use it?
- ▶ Demo of standard libraries
- ▶ Plotting
- ▶ Documentation and help

Homepage

Course homepage <https://github.com/baggepinnen/juliacourse>

What is Julia?

The Julia Language: A fresh approach to technical computing.

- ▶ Dynamically typed
- ▶ “Optionally typed”
- ▶ High-level language, simple syntax
- ▶ Multiple dispatch
- ▶ Version 0.1 Released Feb 2013
- ▶ Version 1.0 Released Aug 2018
- ▶ Latest version 1.2
- ▶ (I use 1.3-rc2 for the threading)

Why use Julia?

- ▶ Solves the dual-language problem. From ThinkJulia.jl : *Julia is a unique programming language because it solves the so-called two languages problem. No other programming language is needed to write high-performance code. This does not mean it happens automatically. It is the responsibility of the programmer to optimize the code that forms a bottleneck but this can be done in Julia itself.*
- ▶ Open source and free: The whole language and all packages!
- ▶ Possible to understand what is going on, Julia is written in Julia!
- ▶ Easy to get started
- ▶ Many third party libraries (3000+, not as many as Python)

Fast

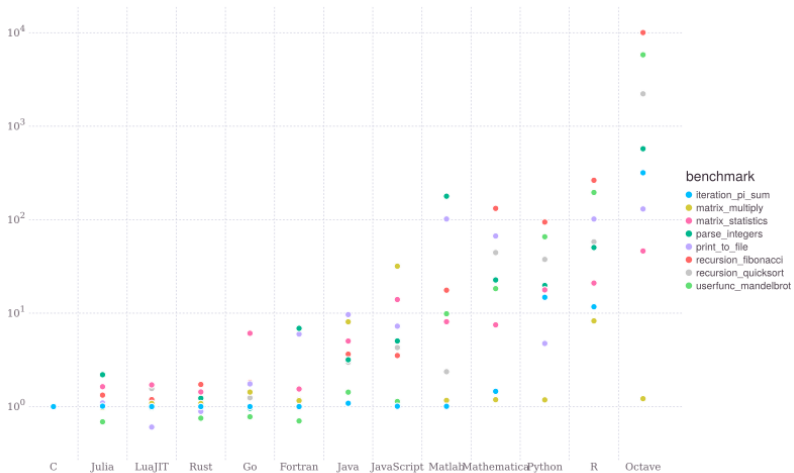


Figure 1: window