


Julia Programming Language: Guide & Reactive Applications



HELLENIC REPUBLIC
National and Kapodistrian
University of Athens

— EST. 1837 —

Julia Team of Mathematics NKUA
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►  : github.com/nkuamath-julia/NASCA23

Julia in a Nutshell

Release of Julia 1.0, 8 August 2018

Created by: Jeff Bezanson, Stefan Karpinski, Viral B. Shah Alan Edelman

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Introduction

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Quote from the creators:

“We want a language that’s **open source**, with a liberal license.
We want the **speed** of C
with the **dynamism** of Ruby.
We want a language that’s **homoiconic**,
with true **macros** like Lisp,
but with obvious, familiar **mathematical notation** like Matlab.
We want something as usable for **general programming** as Python,
as easy for **statistics** as R,
as natural for **string processing** as Perl,
as powerful for **linear algebra** as Matlab,
as good at **gluing programs** together as the shell.
Something that is **dirt simple** to learn,
yet keeps the most **serious hackers** happy.
We want it **interactive** and we want it **compiled**.”

Poster's Content

- Introduction & Guide of Julia Language
- The accuracy of different expressions representing equal quantities
- Interactive program that converts numbers from decimal to b -ary
- Interactive program that prints binary rational numbers within a given range
- Benchmarks of algorithms which find whether a number is prime or not
- Julia's efficiency in the Newton-Raphson Method & matrix computations, benchmarking it against Matlab and Python
- Lagrange & Newton Interpolation

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Thank you for your time!

We would love to see you on the coffee breaks!

The future seems B r i g h t



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