An introduction to Julia programming

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Jeff Bezanson, Stefan Karpinski, Viral Shah, Alan Edelman (2012)

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(Did we mention it should be as fast as C?)" Jeff Bezanson, Stefan Karpinski, Viral Shah, Alan Edelman (2012)

Who is using Julia?

Stanford University. Introduction to Multidisciplinary Design Optimization (Prof. Mykel J. Kochenderfer).

MIT. Integer Programming and Combinatorial Optimization (Prof. Juan Pablo Vielma).

MIT. Optimization Methods (Prof. Dimitris Bertsimas and Dr. Phebe Vayanos).

University at Buffalo. Linear Programming (Prof. Changhyun Kwon).

"Sapienza" University of Rome. Operations Research (Giampaolo Liuzzi).

University of South Florida. Nonlinear Optimization and Game Theory (Prof. Changhyun Kwon).

What can I do with Julia?

Simple Audio IO in Julia (AudioIO).

A neural network (BackpropNeuralNet).

Support vector machines (LIBSVM, LIBLINEAR).

Machine learning (MachineLearning).

Bioinformatics and Computational Biology (Bio).

Curve fitting (CurveFit).

Describe and model financial markets (FinancialMarkets).

Black-box optimization (BlackBoxOptim).

Combinatorics (Combinatorics).

Evolutionary and genetic algorithms (Evolutionary).

Gurobi, GLPK, CPLEX, Cbc, Clp CoinOptServices, JuMP.

And more...

"Julia can be the language that unifies science and programming." (Joshua Ballanco (2016).