Interpolations

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Goals

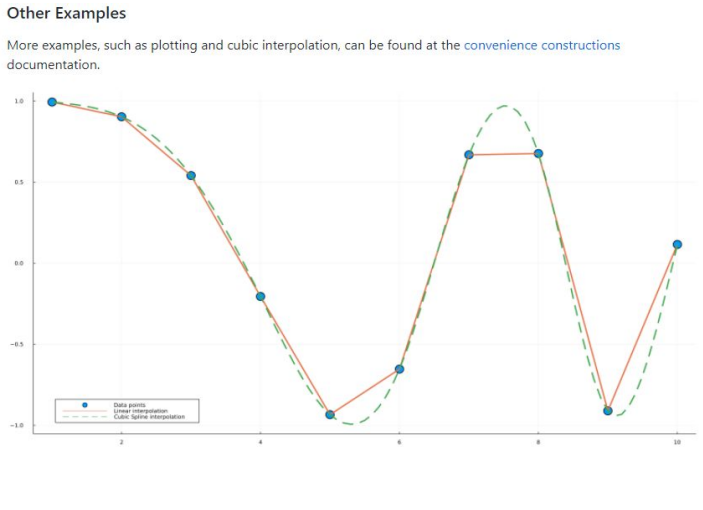
- Performance shoutout based on the spline interpolations on datasets.
- Basic spline implementation garnered for curve-fitting and numerical differentiation specifically for irregular grids.

References

- Anyone can contribute/volunteer towards the interpolation project
  - 64 contributors
  - Contribution made through pull-requests and volunteers
- This package implements a variety of interpolation schemes for the Julia language. It has the goals of ease-of-use, broad algorithmic support, and exceptional performance.
- Tagged has Build Passing and Docs latest
- Link: https://github.com/JuliaMath/Interpolations.jl

Interpolation: Grids

- Linear and cubic spline interpolation being compared side by side in a normally built grid of interpolated data
  - Dotted line: Cubic spline interpolation
  - Orange line: linear interpolation



Question

The documentation states support of irregular grids. How would irregular grids affect the accuracy of spline interpolation?

Experiment

Exploring the accuracy of other interpolation methods such as lagrange interpolation in irregular datasets in relation to cubic/linear spline interpolation.