

Ruby master - Feature #15869

Add abs to Matrix

05/23/2019 07:57 PM - bonafernando (Fernando Wolf Bona)

Status:	Closed
Priority:	Normal
Assignee:	marcandre (Marc-Andre Lafortune)
Target version:	
Description	
<p>While I was studying Markov Chain I had to find the maximum absolute value of the Matrix to divide the matrix in numbers from 0 to 1 to be able to make further analysis. Like this:</p> <pre>q = Matrix[...] max = q.to_a.flatten.map { e e.abs }.max q = q / max</pre> <p>So this is the first of two features that I would like to contribute.</p> <ol style="list-style-type: none">1. Matrix.abs2. Matrix.max	

History

#1 - 05/23/2019 07:58 PM - bonafernando (Fernando Wolf Bona)

- Backport deleted (2.4: UNKNOWN, 2.5: UNKNOWN, 2.6: UNKNOWN)

- Tracker changed from Bug to Feature

#2 - 05/23/2019 08:15 PM - bonafernando (Fernando Wolf Bona)

bonafernando (Fernando Wolf Bona) wrote:

While I was studying Markov Chain I had to find the maximum absolute value of the Matrix to divide the matrix in numbers from 0 to 1 to be able to make further analysis. Like this:

```
q = Matrix[ ... ]
max = q.to_a.flatten.map { |e| e.abs }.max
q = q / max
```

So this is the first of two features that I would like to contribute.

1. Matrix.abs
2. Matrix.max

PR: <https://github.com/ruby/ruby/pull/2199>

#3 - 05/23/2019 10:07 PM - marcandre (Marc-Andre Lafortune)

- Assignee set to marcandre (Marc-Andre Lafortune)

#4 - 05/23/2019 10:45 PM - shevegen (Robert A. Heiler)

Interesting. Not sure if this has to do with Markov Chain per se, but for storing state through automata (in bioinformatics), hidden markov models are also used. Perhaps extending Matrix may be beneficial in general (for ruby as a larger ecosystem; curiously enough, the third most often downloaded gem is diff-lcs, which is probably useful in a variety of different applications; I came to it indirectly through Hamming and Levenshtein distances).

#5 - 10/25/2019 07:22 PM - marcandre (Marc-Andre Lafortune)

- Status changed from Open to Closed