

LoadSlopeyResults (1 call, 20.981 sec)

Generated 21-Apr-2016 09:07:30 using cpu time.

function in file [/Users/Steph/Documents/UCSF/Narlikar lab/HMM analysis](#)

[Slopey/slopey/LoadSlopeyResults.m](#)

[Copy to new window for comparing multiple runs](#)







Refresh

- ☒ Show parent functions ☒ Show busy lines ☒ Show child functions
☒ Show Code Analyzer results ☒ Show file coverage ☒ Show function listing


Parents (calling functions)

| Function Name | Function Type | Calls |
|-----------------------------------|---------------|-------|
| RunSlopeyAnalysis | function | 1 |

Lines where the most time was spent

| Line Number | Code | Calls | Total Time | % Time | Time Plot |
|--------------------|-----------------------------------|--------|------------|--------|---|
| 52 | results{k}.vals(j,:) = samples... | 460046 | 3.791 s | 18.1% |  |
| 51 | results{k}.times(j,:) = sample... | 460046 | 3.712 s | 17.7% |  |
| 49 | results{k}.offset(j,:) = sampl... | 480048 | 3.291 s | 15.7% |  |
| 10 | results_py = load(fullfile(mai... | 1 | 3.238 s | 15.4% |  |
| 48 | results{k}.ch2_transform(j,:) ... | 480048 | 2.975 s | 14.2% |  |
| All other lines | | | 3.975 s | 18.9% |  |
| Totals | | | 20.981 s | 100% | |

Children (called functions)

| Function Name | Function Type | Calls | Total Time | % Time | Time Plot |
|---------------------------------------|---------------|-------|------------|--------|---|
| fullfile | function | 2 | 0 s | 0% | |
| Self time (built-ins, overhead, etc.) | | | 20.981 s | 100.0% |  |
| Totals | | | 20.981 s | 100% | |

Code Analyzer results

| Line number | Message |
|-------------------|--|
| 5 | Input argument 'data_name' might be unused. If this is OK, consider replacing it by ~. |

Coverage results

[Show coverage for parent directory](#)

| | |
|-------------------------|----|
| Total lines in function | 56 |
|-------------------------|----|

Slopey/slopey';

;

nd samples.

giving the

ing the red

parameter

nsformation
d ones.

$l\{1\},1));$
 $l\{2\},1));$

| | |
|--|----------|
| Non-code lines (comments, blank lines) | 20 |
| Code lines (lines that can run) | 36 |
| Code lines that did run | 36 |
| Code lines that did not run | 0 |
| Coverage (did run/can run) | 100.00 % |

Function listing

Color highlight code according to

| time | calls | line | |
|------|-------|-----------|---|
| | | 5 | function results = LoadSlopeyResults(data_name) |
| | | 6 | |
| | 1 | <u>7</u> | maindir = '/Users/Steph/Documents/UCSF/Narlikar lab/HMM analysis |
| | 1 | <u>8</u> | names = dir(fullfile(maindir,'data','*.mat')); |
| | | 9 | |
| 3.24 | 1 | <u>10</u> | results_py = load(fullfile(maindir,'results','all_results.mat')); |
| | | 11 | |
| | 1 | <u>12</u> | results = cell(1,length(names)); |
| | | 13 | |
| | 1 | <u>14</u> | for k = 1:length(names) |
| 0.01 | 48 | <u>15</u> | struct_py = results_py.(names(k).name(1:end-4)); |
| | | 16 | |
| | 48 | <u>17</u> | results{k}.name = names(k).name(1:end-4); |
| | 48 | <u>18</u> | results{k}.fps = 1/struct_py.params.T_cycle; |
| | 48 | <u>19</u> | results{k}.data = struct_py.data; |
| | 48 | <u>20</u> | results{k}.start = double(struct_py.params.start); |
| | 48 | <u>21</u> | results{k}.end = double(struct_py.params.end); |
| | | 22 | |
| | 48 | <u>23</u> | samples = struct_py.samples; |
| | | 24 | % Each structure in allresults has 3 fields: params, data, and |
| | | 25 | % Samples is a num_iterations+1-by-3 cell array. If n is |
| | | 26 | % num_iterations: |
| | | 27 | % currstruct.samples{n,1}{1} is a num_slopey+1-by-1 vector, (|
| | | 28 | % times in seconds of the start and end of each slopey bit. |
| | | 29 | % currstruct.samples{n,1}{2} is a num_slopey-by-1 vector giv |
| | | 30 | % intensity values for each flat bit that separates slopeys. |
| | | 31 | % currstruct.samples{n,2} is a double that gives the offset, |
| | | 32 | % for converting from seconds to frames. |
| | | 33 | % currstruct.samples{n,3} is a 2x1 vector that gives the tra |
| | | 34 | % parameters to obtain real green values instead of idealize |
| | | 35 | |
| 0.01 | 48 | <u>36</u> | results{k}.ch2_transform = zeros(size(samples,1),2); |
| | 48 | <u>37</u> | results{k}.offset = zeros(size(samples,1),1); |
| | 48 | <u>38</u> | try |
| | 48 | <u>39</u> | results{k}.times = zeros(size(samples,1),size(samples{1,1 |
| 0.01 | 46 | <u>40</u> | results{k}.vals = zeros(size(samples,1),size(samples{1,1 |
| | | 41 | |


```

46 41         non_vector = 1;
2  42     catch
2  43         results{k}.times = zeros(size(samples,1),2);
2  44         results{k}.vals = zeros(size(samples,1),2);
2  45         non_vector = 0;
2  46     end
48 47     for j = 1:size(samples,1)
2.97 480048 48         results{k}.ch2_transform(j,:) = samples{j,3};
3.29 480048 49         results{k}.offset(j,:) = samples{j,2};
1.58 480048 50         if non_vector == 1
3.71 460046 51             results{k}.times(j,:) = samples{j,1}{1};
3.79 460046 52             results{k}.vals(j,:) = samples{j,1}{2};
0.04 20002 53             else
0.16 20002 54                 results{k}.times(j,:) = samples{j,1}(1,:);
0.18 20002 55                 results{k}.vals(j,:) = samples{j,1}(2,:);
0.03 20002 56             end
1.51 480048 57         end
58
48 59     clear samples
48 60 end

```