

dmvgt (224 calls, 38.512 sec)

Generated 04-Nov-2015 13:10:37 using cpu time.

function in file <C:\Users\aba228\Dropbox\MPHIL\VU\MitISEM\MyMit\include\dmvgt.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
MitISEM_new	function	62
fn_ISEM	function	100
fn_optimt	function	52
Mit_MH	function	10

Lines where the most time was spent

Line Number	Code	Calls	Total Time	% Time
14	dcoms(ii,h) = dmvgt(theta(ii,:...	3298000	37.718 s	97.9%
15	end	3298000	0.581 s	1.5%
17	tmp = log(repmat(mit.p,N,1)) +...	224	0.111 s	0.3%
18	dens = sum(exp(tmp),2);	224	0.046 s	0.1%
20	dens = log(dens);	224	0.036 s	0.1%
All other lines			0.020 s	0.1%
Totals			38.512 s	100%

Children (called functions)

Function Name	Function Type	Calls	Total Time	% Time	Time Plot
dmvgt	function	3298000	29.513 s	76.6%	
Self time (built-ins, overhead, etc.)			9.000 s	23.4%	



Totals			38.512 s	100%	
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Code Analyzer results

No Code Analyzer messages.

Coverage results

[Show coverage for parent directory](#)

Total lines in function	36
Non-code lines (comments, blank lines)	18
Code lines (lines that can run)	18
Code lines that did run	18
Code lines that did not run	0
Coverage (did run/can run)	100.00 %

Function listing

Color highlight code according to

time	calls	line	
		1	function dens = dmvgd(theta, mit, L, GamMat)
		2	% density of a mixture of multivariate t dist
		3	% L (log) - return log-density values if L=true
		4	% % MATLAB
	224	5	[H,d] = size(mit.mu); % number of components
	224	6	[N,~] = size(theta);
	224	7	dcoms = zeros(N,H);
	224	8	for h = 1:H
< 0.01	328	9	mu_h = mit.mu(h,:);
	328	10	Sigma_h = mit.Sigma(h,:);
0.02	328	11	Sigma_h = reshape(Sigma_h,d,d);
	328	12	df_h = mit.df(h);
	328	13	for ii = 1:N
37.72	3298000	14	dcoms(ii,h) = dmvgd(theta(ii,:),
0.58	3298000	15	end
< 0.01	328	16	end
0.11	224	17	tmp = log(repmat(mit.p,N,1)) + log(dcoms);
0.05	224	18	dens = sum(exp(tmp),2);
	224	19	if (L == true)
0.04	224	20	dens = log(dens);
	224	21	end
		22	
		23	% % C-MEX
		24	% L = double(L);
		25	% dens = dmvgd_mex(theta, mit.mu, mit.Sig
		26	

```
contributions
```

```
cue
```

```
ents, dimension of t distribution
```

```
mu_h, Sigma_h, df_h, GamMat);
```

```
);
```

```
gma, mit.df, mit.p, GamMat, L);
```

```

27 % % comparison of the MATLAB and C-MEX kernel
28 %     lnd_mex = dmvgd_mex(theta, mit.mu, mit.
29 %     fprintf('\n *** sum(abs(lnd_mex-lnd)> €
30 %     fprintf(' *** sum(abs(lnd_mex-lnd)) = %
31 %     if (sum(abs(lnd_mex-dens)) > 1e-4 )
32 %         keyboard
33 %         [val, MM] = max(abs(lnd_mex-dens));
34 %     end
35
224 36 end

```

```

l evaluation functions
.Sigma, mit.df, mit.p, GamMat, 1);
eps) = %6.4f ***\n', sum(abs(lnd_mex-dens)>eps) );
%16.14f ***\n\n', sum(abs(lnd_mex-dens))) );

; % lnd_mex(MM)-dens(MM)

```