

Hi,

I am trying to create a column vector of the form

$E = \begin{bmatrix} 1, 1, 1, \dots, 1 \\ e_1, e_2, \dots, e_p \\ \vdots \\ e_1(n), e_2(n), \dots, e_p(n) \end{bmatrix}$

where the first row values are one, p user input values. Now i need to fill the matrix with random values that are obtained from an PC image.

Here is the code for reference:

```
covMatrix = Correlate(image11, /COVARIANCE, /DOUBLE)
eigenvalues = EIGENQL(covMatrix, EIGENVECTORS=eigenvectors, /DOUBLE)
Print, eigenvalues
Print, 'First Component (%): ', eigenvalues[0]/Total(eigenvalues)*100
```

```
for i=0, bands-1 do begin
  pc = eigenvectors ## Transpose(image11)
  pc1[*,* ,i] = Reform(pc[* ,i], rows, cols)
; pc1[*,* ,i] = Reform(temporary(pc[* ,i]), dims[0], dims[1],4)
endfor
```

p = 30

```
TestMatrix = fltarr(p,p)
TestMatrix(*,0) = 1
idx1 = fltarr(1,p)
;data = pc(*,p-1)
```

```
for i=0,p-1 do begin
  seed = 100L
  idx = floor(randomu(seed,p)) + 1
  TestMatrix(1:p,*) = pc(idx,*) ; error at
this place
  idx1(i) = idx;
endfor
```

Finally, i need to construct TestMatrix
