

Jeffrey Schulz

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ECE 7720

### Mini Project 1

- a. No, the covariance computed by the built-in python function was NOT the exact same as the hand calculated ones when normalized to one, but they had all the same distances. This wasn't wrong as the **order** in which the eigenvalues are used and calculated affects the order of the eigenvalues. This also affects the order of the eigenvectors that you calculate from the eigenvalues. Similarly, the equation from the eigenvector system which is chosen to be solved first changes the order and orientation of the eigenvectors.

Output from mp1.py:

