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| --- | --- | --- | --- | --- | --- |
| **LPF**  **Equalized\_data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.8421 | 0.7894 | 0.618 | 0.7763 | 0.6447 |
| Sigma=5 | 0.828 | 0.7368 | 0.6184 | 0.75 | 0.7105 |
| Sigma=10 | 0.815 | 0.7368 | 0.618 | 0.7368 | 0.7368 |
| Sigma=15 | 0.8157 | 0.73 | 0.618 | 0.776 | 0.644 |

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| **HPF**  **Equalized-data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.77 | 0.72 | 0.618 | 0.52 | 0.55 |
| Sigma=5 | 0.78 | 0.82 | 0.618 | 0.72 | 0.64 |
| Sigma=10 | 0.815 | 0.75 | 0.618 | 0.75 | 0.7368 |
| Sigma=15 | 0.8289 | 0.72 | 0.618 | 0.7105 | 0.75 |

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| **LPF+HPF**  **Equalized data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.8289 | 0.802 | 0.618 | 0.539 | 0.697 |
| Sigma=5 | 0.789 | 0.8684 | 0.618 | 0.8289 | 0.7236 |
| Sigma=10 | 0.8421 | 0.815 | 0.618 | 0.828 | 0.6842 |
| Sigma=15 | 0.8421 | 0.881 | 0.618 | 0.8815 | 0.4868 |

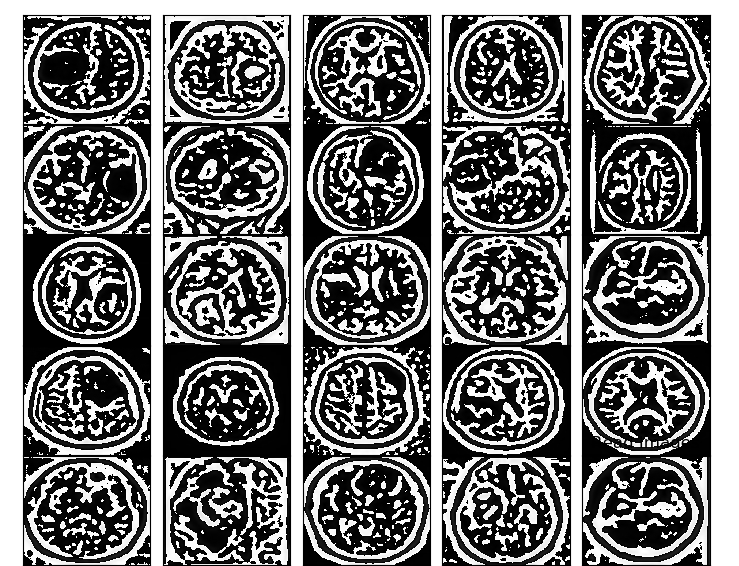
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| **Median filter**  **Equalized data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=3 | 0.8289 | 0.7894 | 0.6184 | 0.8157 | 0.6447 |
| Sigma=5 | 0.8289 | 0.8026 | 0.6184 | 0.8157 | 0.7368 |
| Sigma=11 | 0.8289 | 0.7763 | 0.6184 | 0.8157 | 0.75 |
| Sigma=15 | 0.8289 | 0.7763 | 0.6184 | 0.8157 | 0.7894 |

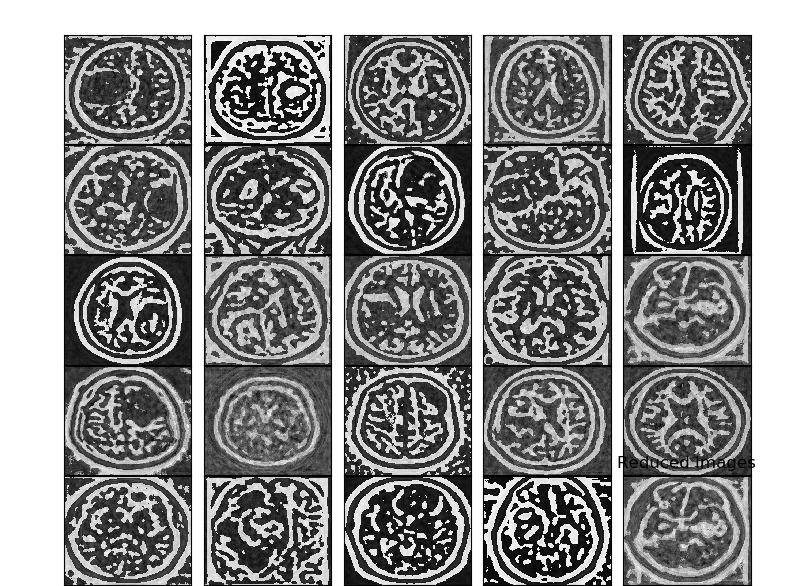
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| **LPF**  **Contrast data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.8157 | 0.6184 | 0 .6447 | 0.6710 | 0.8026 |
| Sigma=5 | 0.815 | 0.67 | 0.618 | 0.684 | 0.6710 |
| Sigma=10 | 0.8421 | 0.7105 | 0.618 | 0.7368 | 0.6315 |
| Sigma=15 | 0.8157 | 0.7763 | 0.618 | 0.7763 | 0.6052 |

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| **HPF**  **Contrast data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.855 | 0.855 | 0.618 | 0.73 | 0.657 |
| Sigma=5 | 0.815 | 0.789 | 0.618 | 0.776 | 0.631 |
| Sigma=10 | 0.75 | 0.71 | 0.618 | 0.736 | 0.697 |
| Sigma=15 | 0.71 | 0.67 | 0.618 | 0.72 | 0.69 |

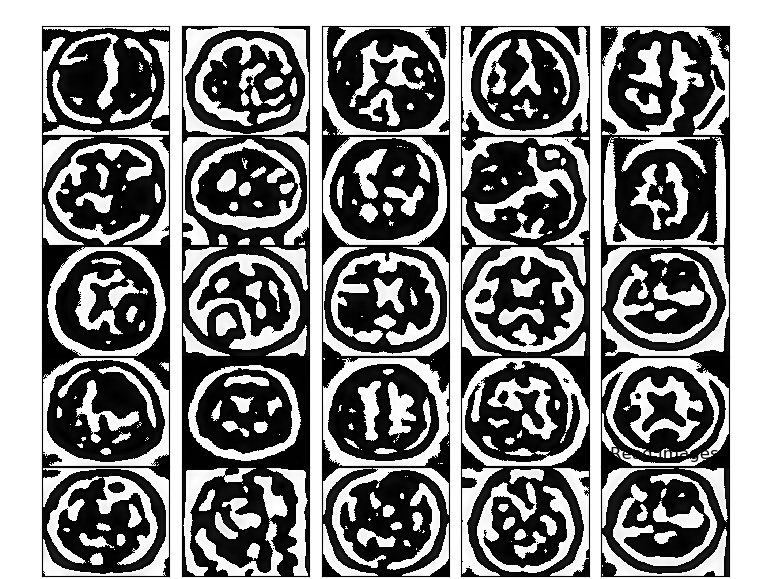
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| **LPF+HPF**  **Contrast data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=2 | 0.855 | 0.8289 | 0.618 | .6710 | 0.828 |
| Sigma=5 | 0.78 | 0.77 | 0.618 | 0.8026 | 0.71 |
| Sigma=10 | 0.73 | 0.75 | 0.618 | 0.75 | 0.59 |
| Sigma=15 | 0.76 | 0.77 | 0.618 | 0.7631 | 0.6184 |

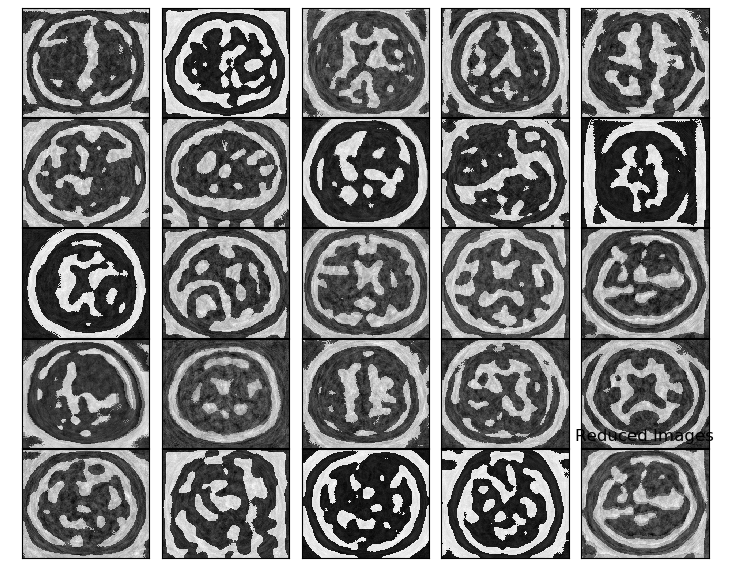
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| --- | --- | --- | --- | --- | --- |
| **Median filter**  **Contrast data** | SVM Classifier | KNN | SVM with PCA | KNN WITH PCA | Neural net with PCA |
| Sigma=3 | 0.815 | 0.605 | 0.6447 | 0.6184 | 0.7763 |
| Sigma=5 | 0.80263 | 0.605 | .6315 | 0.671 | 0.73 |
| Sigma=11 | 0.8026 | 0.5526 | 0.631 | 0.618 | 0.7105 |
| Sigma=15 | 0.7894 | 0.605 | 0.618 | 0.5526 | 0.5789 |

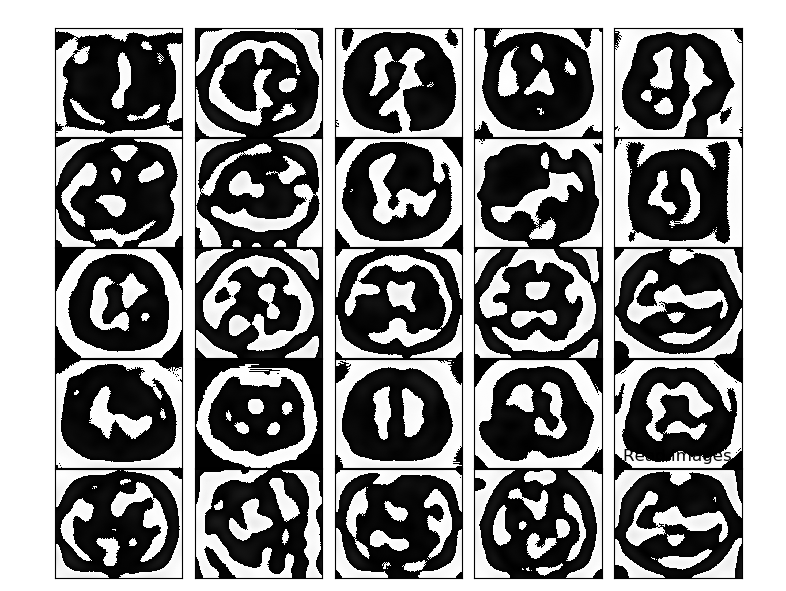
lpf+hpf sigma=5 on equalized data

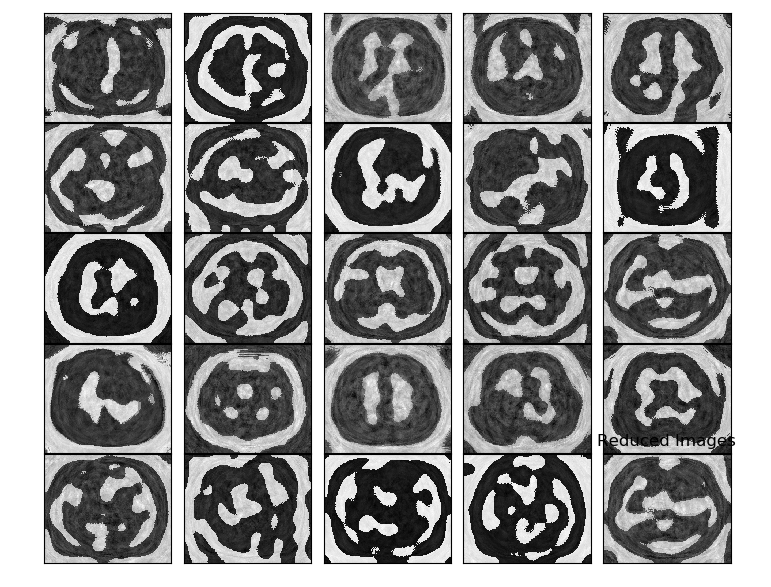
pca image

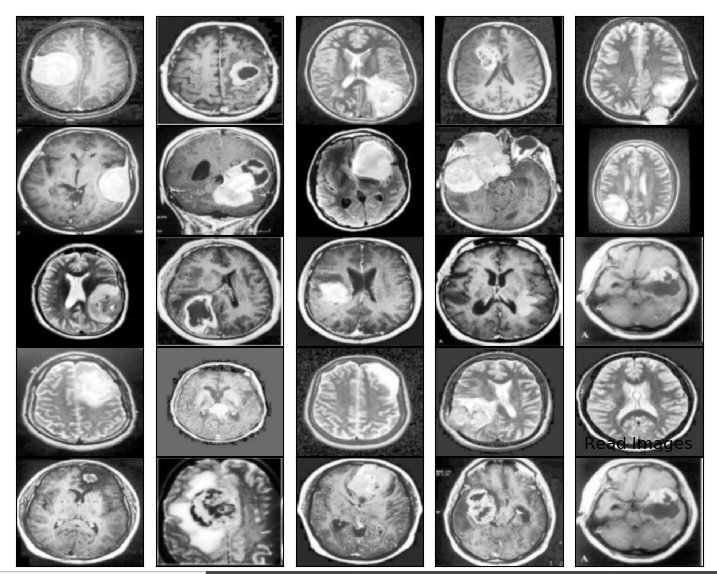
So equalized images improve accuracy of classifiers.

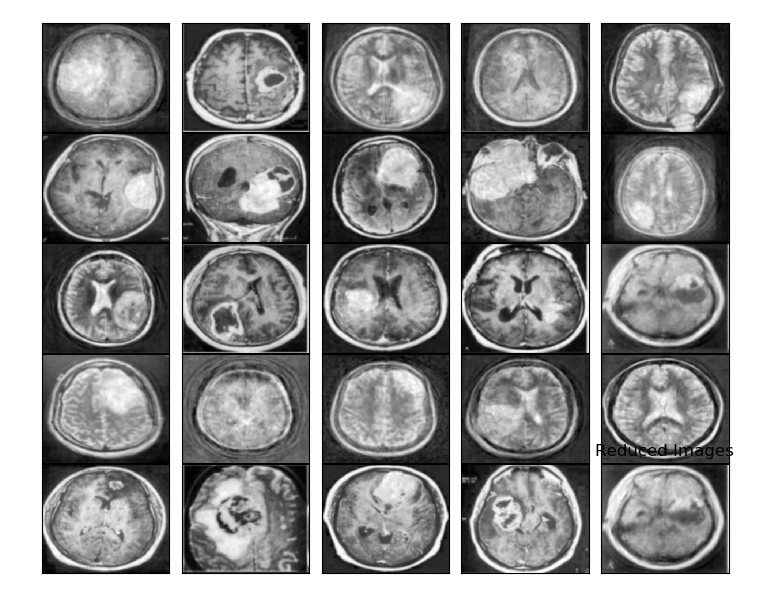
 lpf+hpf sigma=10 on equalized data

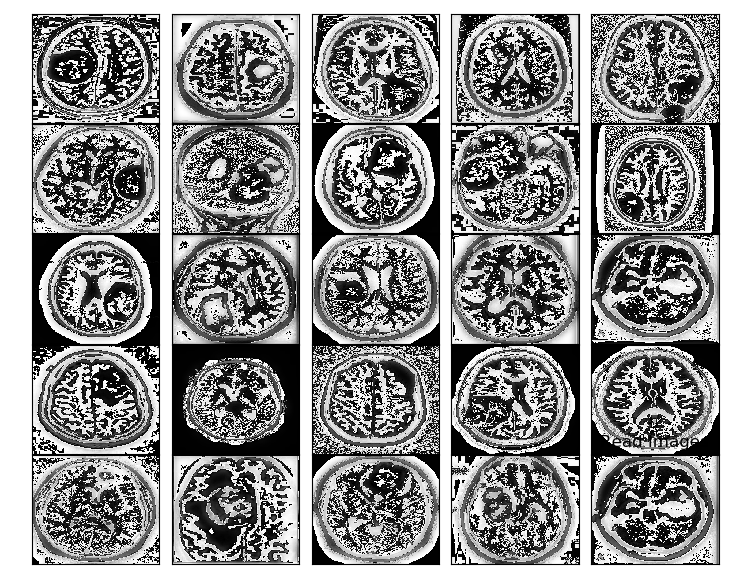
pca

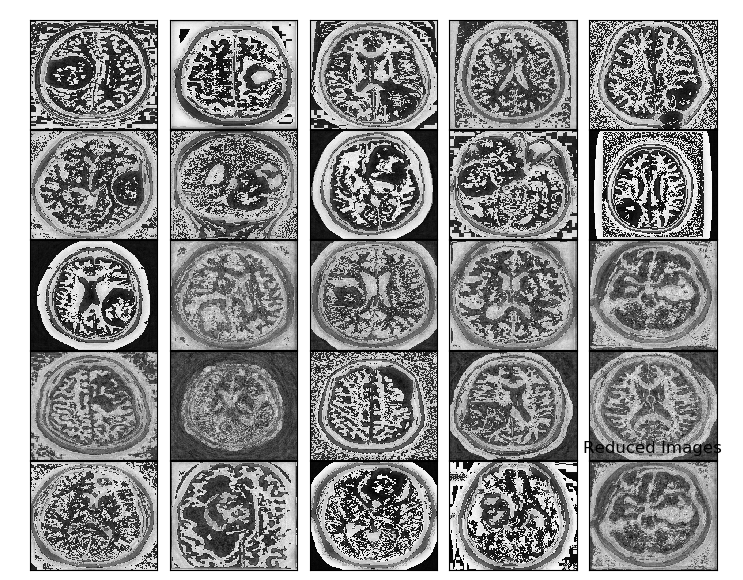
 lpf+hpf sigma=15 on equalized data

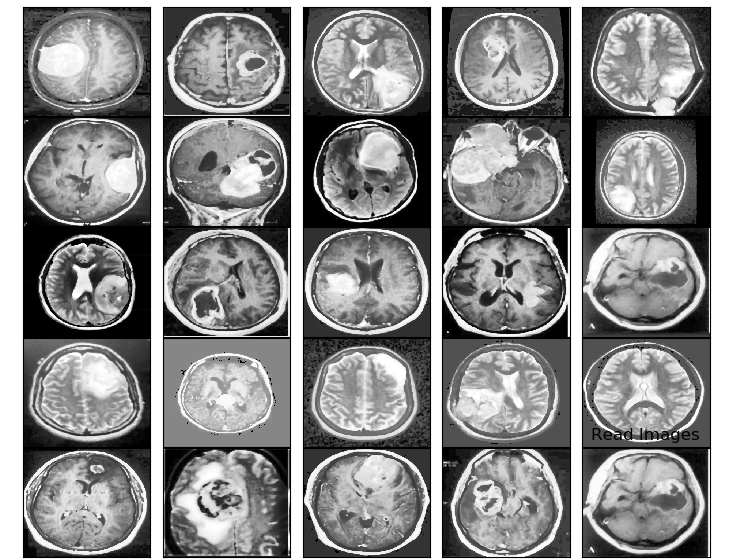
pca

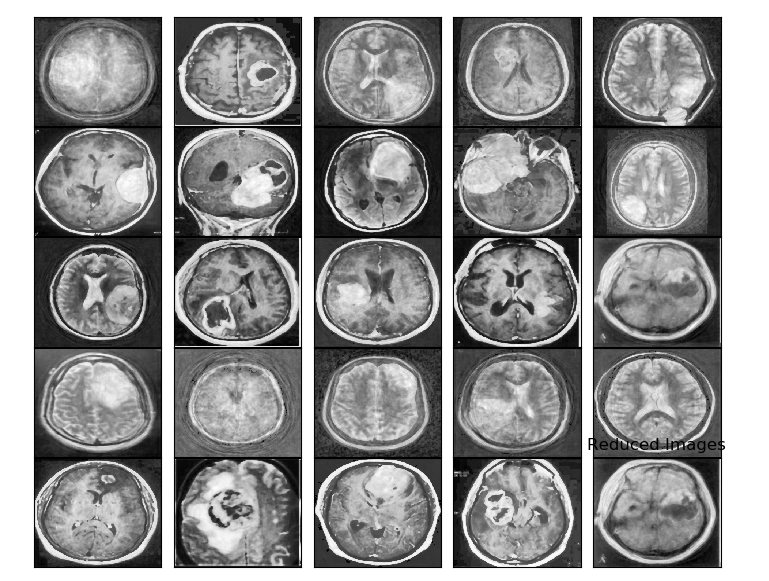
 lpf sigma=2 on equalized data

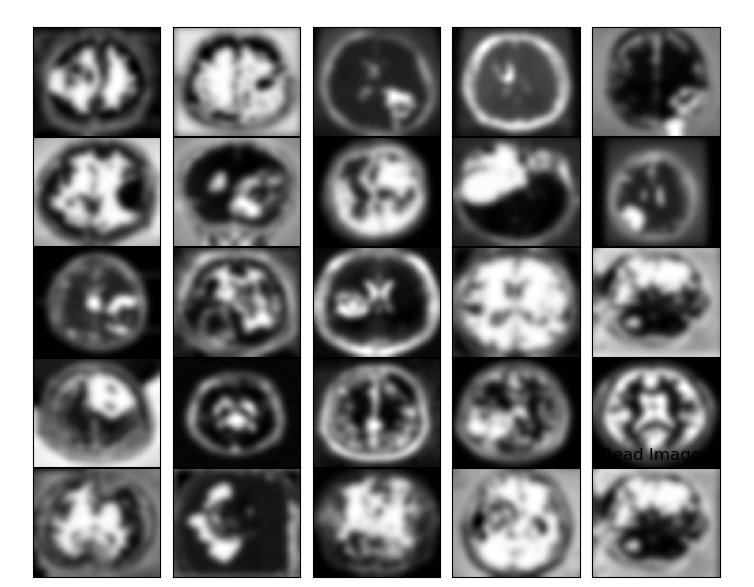
pca

hpf sigma=10 equalized image

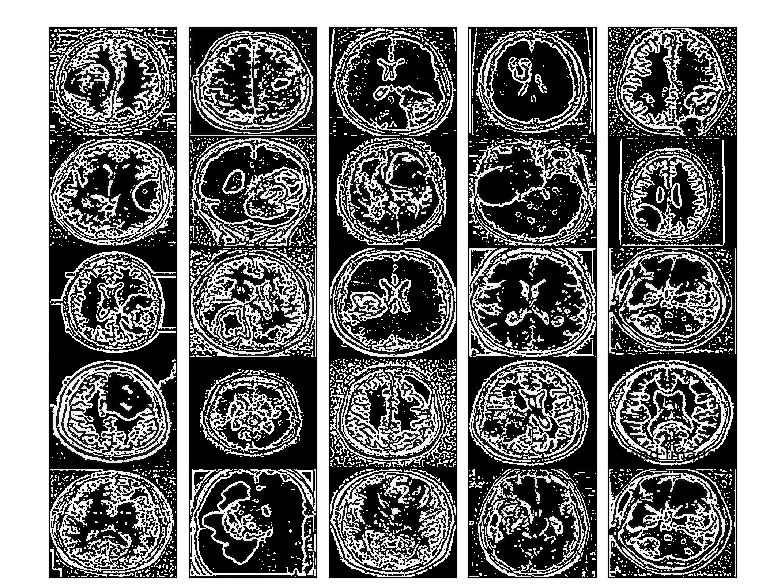
pca

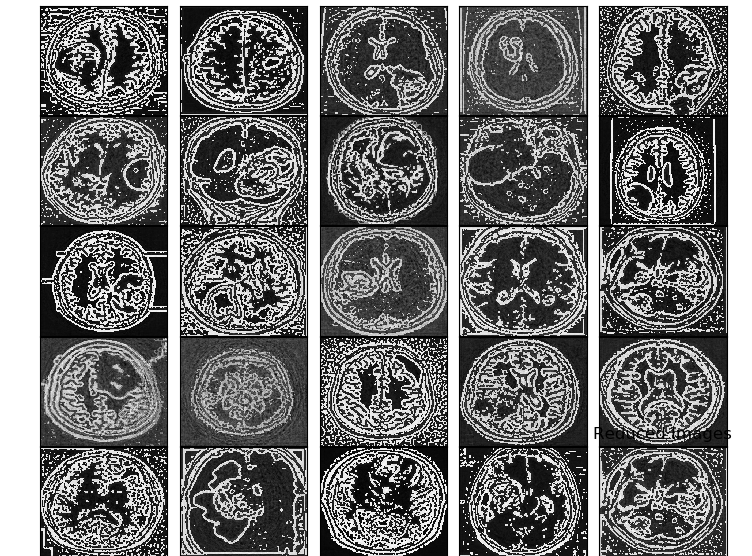
median filter sigma=5 equalized image

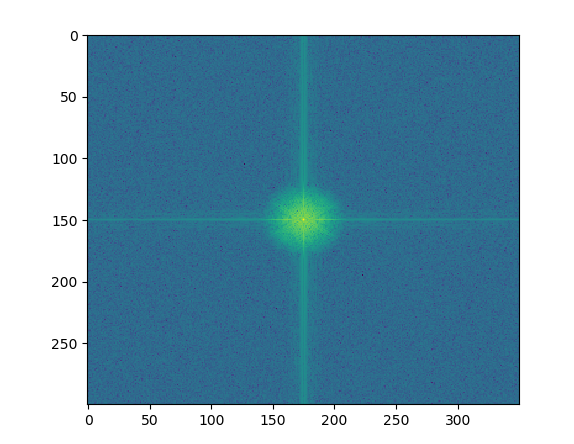
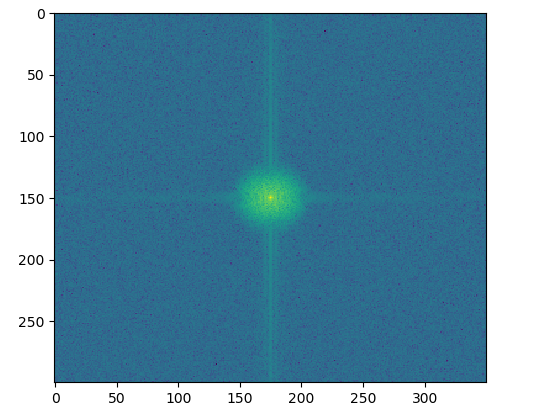
pca

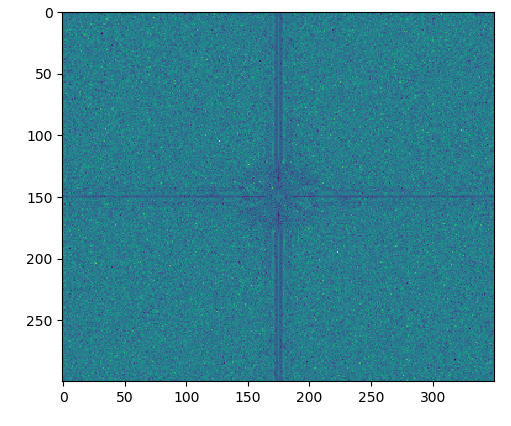
lpf sigma=10 contrast \_data

pca

lpf+hpf sigma=2 on contrast data

pca

fft of yes imagefft of no image

difference of above 2 images.

For discrete data klt and pca are no different.