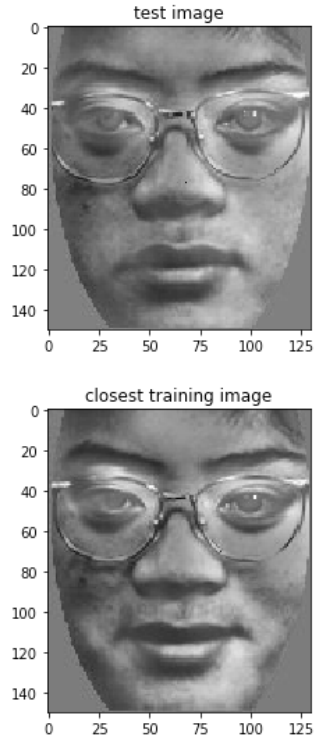
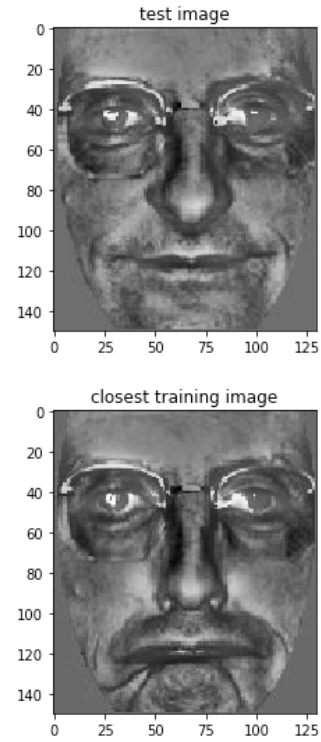
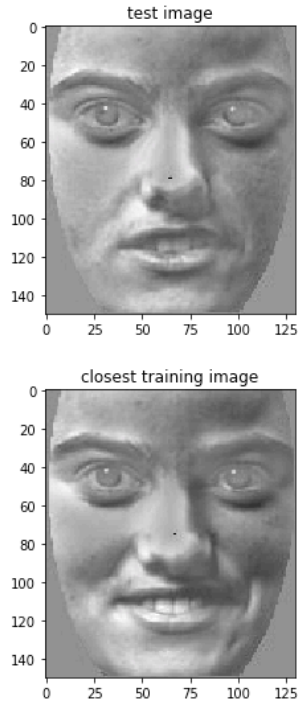
Test results



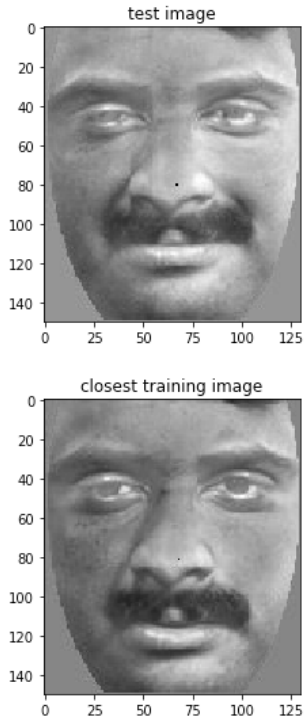

```
minimum distance:  5135.051924698312
index for the min distance:  507
```




```
minimum distance:  4908.282705660068
index for the min distance:  485
```




```
minimum distance:  3899.0782006492523
index for the min distance:  11
```




```
minimum distance:  4581.7554153472565
index for the min distance:  231
```