**LIDC Meeting - 9/29/2016**

* Only used images where there is complete agreement between the radiologists. There are only 98 such cases.
* Removed cases that correspond to a malignancy value of 3. There are 80 cases left.
* Here are the final counts (highly unbalanced):

|  |  |
| --- | --- |
| **Class** | **Count** |
| 1 | 72 |
| 5 | 6 |
| 2 | 2 |

* All the cases with malignancy of 1 or 2 is marked “benign” and those with 5 (or 4) are marked “malignant”.
* Eigen nodules are generated separately for the malignant and benign cases.

|  |  |  |
| --- | --- | --- |
|  | **Benign – 27x25** | **Malignant –43x48** |
| **PC1** | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\1,2_PC1.png 53% | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\4,5_PC1.png 35% |
| **PC2** | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\1,2_PC2.png 16% | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\4,5_PC2.png 22% |
| **PC3** | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\1,2_PC3.png 11% | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\4,5_PC3.png 17% |
| **PC4** | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\1,2_PC4.png 7% | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\4,5_PC4.png 15% |
| **PC5** | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\1,2_PC5.png 2% | C:\Users\SYARLAG1\Documents\Lung-Nodule-Identification\EigenNodulesPerfectCases\4,5_PC5.png 11% |

* Plan to use 5-NN to classify the test images. When a test image shows higher similarity with 3 or more of these images from one category, we classify it into that category.