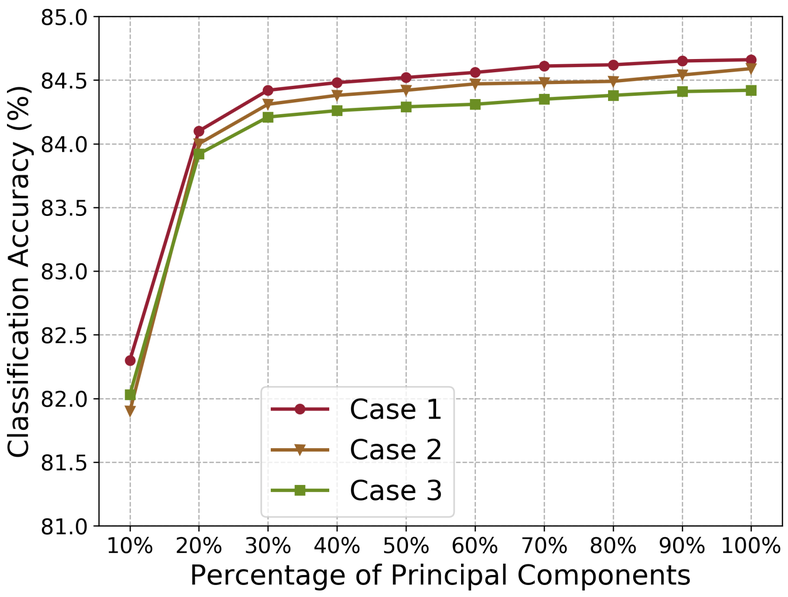
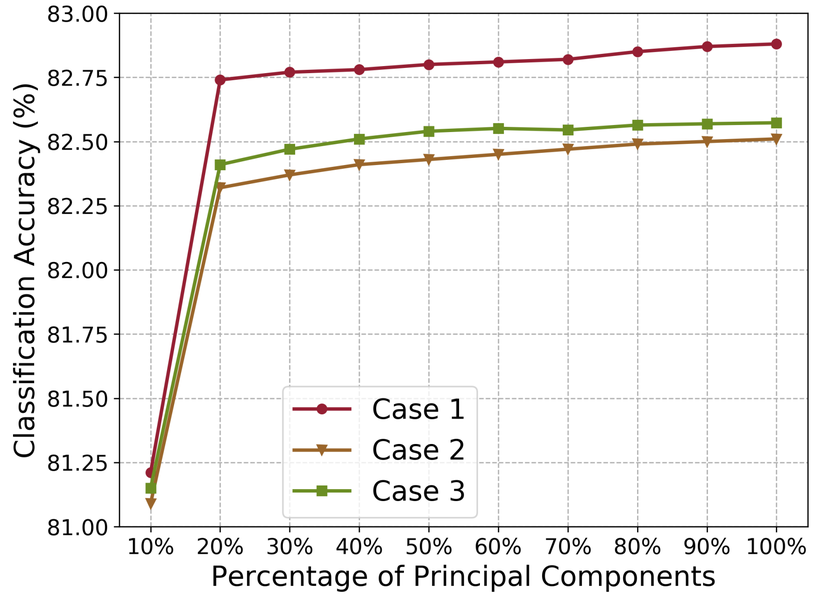
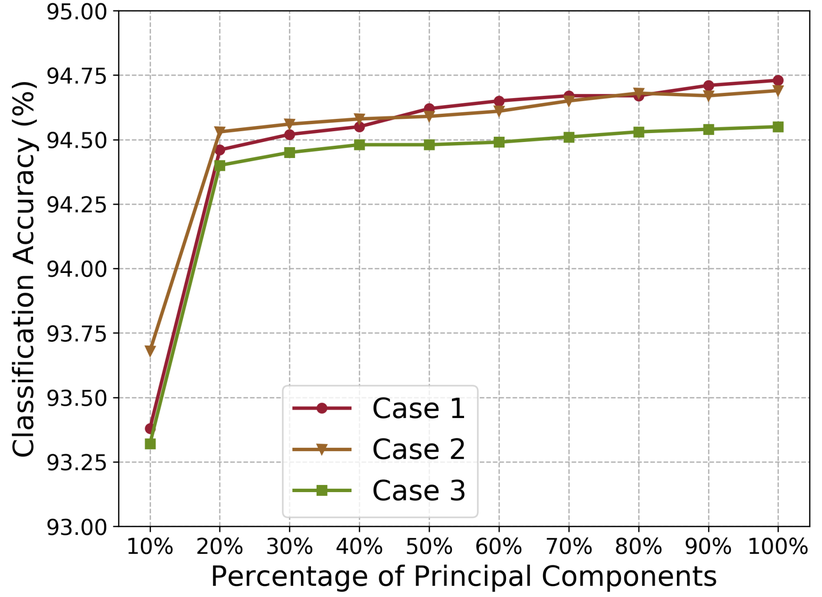
For a representation matrix **H** from a well-trained SSL model, we utilize PCA to reduce the dimensionality of the representation matrix **H** and investigate the impact of different principal components on classification performance. The 100% on the horizontal axis indicates the utilization of the original representation matrix **H**. For each dataset, we investigate three representation matrices, each corresponding to a curve.



Cora



Pubmed



CS

It can be observe that

- As the content of principal components increases, the performance gradually improves.
- The components at the tail end of each curve do not degrade performance, indicating that the components corresponding to small eigenvalues do not manifest as harmful noise.