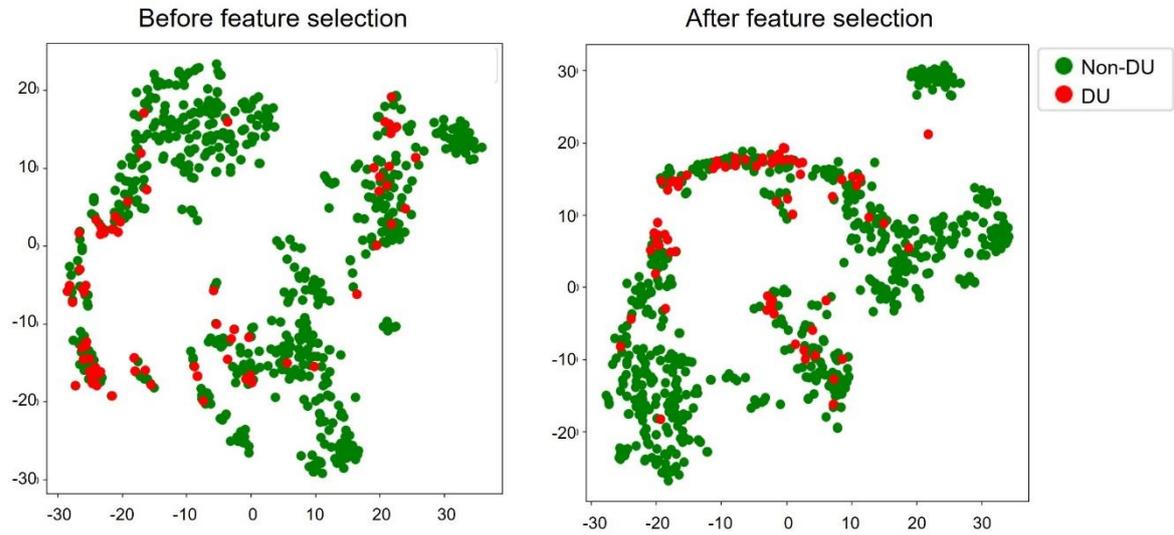
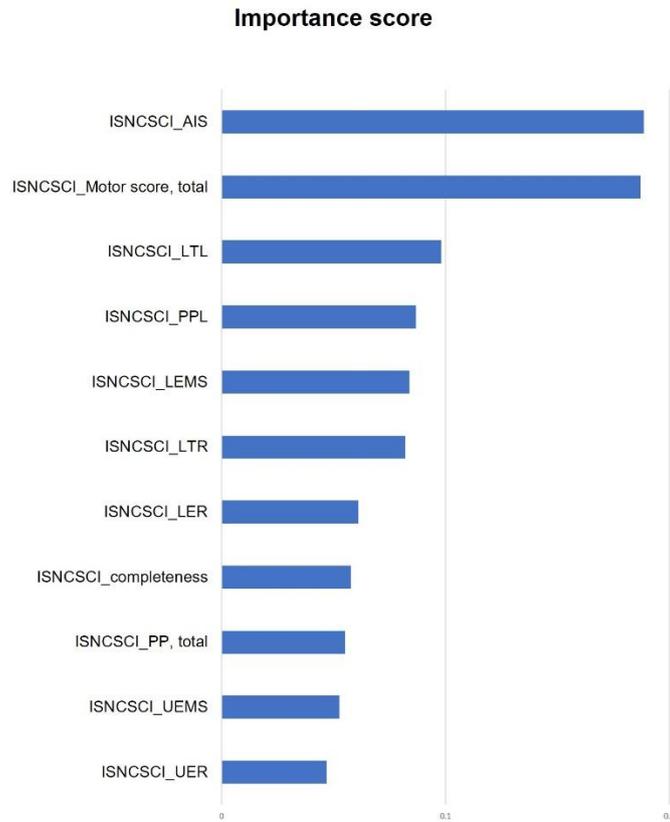


## Supplementary Materials



**Figure S1. tSNE plot before and after feature selection in CNUH data**

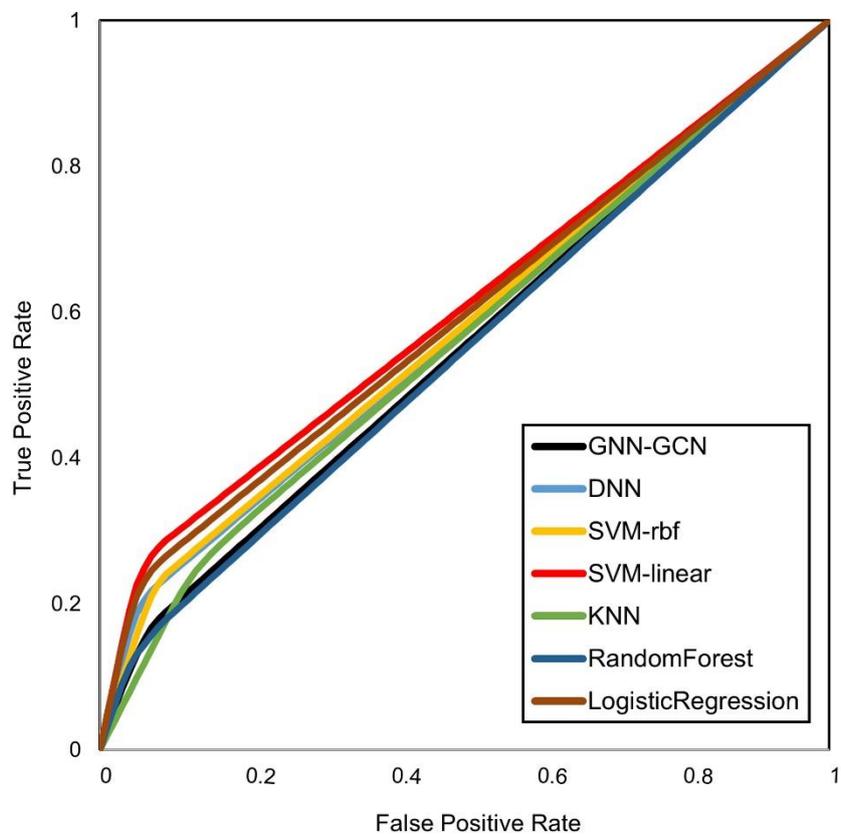
The tSNE plot from the KNN model classified PUs more clearly after feature selection.



**Figure S2. Importance scores of the top 11 featured parameters based on the outcome of the KNN model in CNUH**

The top 11 featured parameters were ranked by importance, and the 'AIS' item from the ISNCSCI had the highest importance score.

Abbreviations: ISNCSCI = International Standards for Neurological Classification of Spinal Cord Injury; AIS = ASIA impairment scale; LTL = Light touch; PPL = Pinprick, left; LEMS = Lower Extremity Motor Subscore; LTR = Light touch, right; LER = Lower extremity, right; PP, total = Pinprick, total; UEMS = Upper Extremity Motor Subscore; UER = Upper extremity, right.



**Figure S3. Receiver operating characteristic (ROC) curve of each machine learning algorithm in DKUH using the ISNCSCI dataset**