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[54] SYSTEM AND METHOD FOR A 1D-DICNN-GRU-BASED DEEP LEARNING FEATURE EXTRACTION MODEL IN NON-INTRUSIVE ELEVATOR MONITORING

基於 1D-DICNN-GRU 的深度學習特徵提取模型的非侵入式電梯監測系統及方法

[57] The present invention discloses a non-intrusive elevator condition monitoring method based on a deep learning model, comprises the steps of: extracting multi-variant signals from non-intrusive current sensors (102); aggregating and converting the extracted multi-variant signals into processable uniformed signal data (104); integrating the uniformed signal data segments into a deep learning model (106); training the deep learning model with validation and testing (108); and monitoring the condition and detecting anomaly of the elevator based on the deep learning model (110).

本發明公開了一種基於深度學習模型的非侵入式電梯狀態監測方法，包括以下步驟：從非侵入式電流傳感器（102）中提取多變量信號；聚集提取的多變量信號並將其轉換成可處理的統一信號數據（104）；將統一信號數據段整合到深度學習模型中（106）；通過驗證和測試訓練深度學習模型（108）；基於深度學習模型（110）監測電梯的狀態和檢測電梯的異常。

