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Nunchi

(A system to predict employee absenteeism reasons using machine learning algorithms)

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Abstract

The relationship between the organization and the employee contribution is crucial. The organization's reputation, productivity and sustainability can be depending on the performance of the employee. Absenteeism of employees is a risk factor that can affect an organization performance crucially. Due to that reason, analyzing an employee absenteeism behavior can be favorable on behalf of organization's wellbeing.

The proposed system uses machine learning algorithms to predict absenteeism hours by analyzing given data and find individual or the overall reasons why the employees getting absent. Since this system using machine learning techniques it's able to find out some patterns, which aren't visible to the human naked eyes. Data analyzing libraries such as pandas, matplotlib used to analyze the dataset. Using machine learning algorithms like XGBoost, random forest regressors were used to predict absenteeism hours. This system was designed to use for the Human resources managers to identify the employee absenteeism hours and reasons which can help them to assign the workload to suitable employee and take necessary actions for that absent employee. Without focusing on only one employee, the suggested system can highlight the most crucial absenteeism reason from focusing on multiple employees. Therefore, the HR of the organization can take the necessary actions.

Key words: Absenteeism, machine learning, data analyzing, Human resource