

HCRC RESEARCH SPOTLIGHT: FINDINGS AND INSIGHTS

A DECADE OF RESEARCH ON MACHINE LEARNING TECHNIQUES FOR PREDICTING EMPLOYEE TURNOVER: A SYSTEMATIC LITERATURE REVIEW PAPER

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Authors: [Mariam Al Akasheh](#), [Esraa Faisal Malik](#), [Omar Hujran](#), [Nazar Zaki](#)

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SUMMARY

This research investigates the utilization of Artificial Intelligence (AI) over the past ten years for predicting employee turnover. The researchers examined 52 relevant studies published between 2012 and April 2023. The results indicate that over 20 AI techniques have been used to predict employee turnover in various institutions. Furthermore, the review reveals that salary and overtime are the most critical factors for predicting employee turnover.

FINDINGS

The significance of utilizing AI cannot be overstated in predicting employee turnover, as it enables end-users to make informed and consequential decisions based on data.

The analysis of the past decade's research on AI techniques for predicting employee turnover reveals key factors that contribute to employee turnover, such as salary, job satisfaction, overtime, and environmental satisfaction. Organizations should prioritize these factors to reduce employee turnover.

INSIGHTS

Implementing AI to forecast employee attrition is vital for businesses seeking to enhance workforce management. By utilizing a data-driven methodology, AI surpasses conventional approaches by facilitating the analysis of vast datasets with speed and accuracy.

AI is capable of discerning patterns within employee data by utilizing machine learning algorithms; this enables organizations to detect potential disengagement at an early stage. The capacity to foresee future events enables human resources professionals to effectively manage concerns, execute focused retention strategies, and mitigate turnover rates. Businesses can effectively allocate resources, promote a positive work environment, and boost employee engagement thanks to the foresight that AI-powered predictive analytics provides. According to research, using AI to predict employee turnover protects institutional knowledge and builds a robust and united workforce. This sets up companies for long-term success in a business world that is constantly changing.

Implementing feature or factor importance method has the potential to aid HR management in developing retention interventions for employees with a high likelihood of resignation. This strategy entails identifying the most influential model characteristics. By incorporating these strategies into their data-driven decision-making processes, organizations can optimize their HR management strategies and mitigate the negative effects of employee turnover on their operations.

Citation:

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