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Machine Learning Advancements in Healthcare Insurance: A Comprehensive Review and Future Directions

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Abstract: By conducting a thorough literature review, this study examines how sophisticated machine learning algorithms are being used in the healthcare insurance industry. Predictive modeling, fraud detection, enrollment forecasting, premium prediction, illness prediction, sentiment analysis, and claim processing optimization are just a few of the areas covered by the research articles compiled for this study. Provide insights into the present state-of-the-art and highlight possibilities for future research and innovation by reviewing the techniques, major results, and emerging patterns across these studies. The study shows how machine learning may help the healthcare insurance sector with decision-making, resource allocation, and risk mitigation. Furthermore, it reviews some difficulties, recommended approaches, and consequences of implementing these technologies, such as the significance of multidisciplinary cooperation, ethical concerns, and regulatory compliance. This study helps move the needle on healthcare insurance's and machine learning's junction, encouraging further research and making data-driven solutions more accessible to businesses.

Keywords: Healthcare, Machine Learning, Literature Reviews

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