

AI-Driven Voice Training and Singing Improvement: A Comprehensive Literature Review

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Abstract

This comprehensive review navigates the transformative potential of AI-driven technologies in vocal training and music education, with a focus on Voice Matching and Personalized Singing Improvement. It precisely explores a diverse array of subjects, providing a nuanced and insightful overview of the current state of knowledge in this dynamic field. By examining the AI's role in vocal training and music education, this review strategically identifies current gaps and limitations, proposing an innovative approach to systematically address these constraints. By bridging theoretical comprehension with a practical implementation, it significantly contributes to the advancement of both realms. The review not only sheds light on existing research but also lights up paths for future exploration, making it a valuable resource for future research endeavours. It underscores the transformative possibilities that AI holds for personalized singing improvement and voice matching, opening opportunities for innovative approaches that could shape the future of music education.

Keywords: *AI-driven vocal training, Personalized singing improvement, Artificial intelligence, Voice matching, Machine learning*