

Voice Based Medicine Dispensing Machine

Achal Bawane¹, Rahul Nawkhare², Rupali Dasarwar³

Student, AI & DS, Wainganga College of Engineering and Management, Nagpur, India ¹

Professor, AI & DS, Wainganga College of Engineering and Management, Nagpur, India^{2,3}

Professor, AI & DS, Wainganga College of Engineering and Management, Nagpur, India³

Abstract: *The Medicine Vending Machine introduces an innovative voice-controlled automated system designed to dispense medications conveniently and efficiently. By integrating embedded technology with voice recognition, this machine simplifies access to medicines, particularly for users facing difficulties with traditional systems. Medicines are vital for health maintenance, disease prevention, and treatment; however, social disparities have contributed to health inequities. This vending machine addresses such challenges by offering common medications and first aid supplies in public places like malls, highways, railway stations, and bus stands, ensuring 24/7 availability. It is especially beneficial for rural and remote areas where medical stores are scarce during emergencies, the machine employs interactive voice technology to enhance medication adherence and safety by providing audible instructions about medication regimens.*

Keywords: Voice recognition technology, automated medication dispensing, Patient safety, Medication adherence, Emergency medical access

