

Large Language Model for Chatbot

Prof. Trupti Farande¹, Vishal Waghmare², Rushikesh Barkade³, Adesh Shinde⁴, Omkar Naikade⁵

Professor, Department of Artificial Intelligence and Data Science¹
Students, Department of Artificial Intelligence and Data Science^{2,3,4,5}
Shree Ramchandra College of Engineering, Pune, Maharashtra, India

Abstract: *The integration of Artificial Intelligence (AI) and Natural Language Processing (NLP) has led to the development of sophisticated Chatbots capable of mimicking human conversation and providing automated responses. In the context of the mining industry, which operates under a complex framework of Acts, Rules, and Regulations, there is a growing need for a comprehensive and easily accessible information system. This research proposes the implementation of a 24/7 available Chatbot, equipped with the ability to address stakeholder and customer queries regarding various legal aspects, including the Coal Mines Act, 1952, Indian Explosives Act, 1884, Colliery Control Order, 2000, Colliery Control Rules, 2004, The Coal Mines Regulations, 2017, and The Payment of Wages (Mines) Rules, 1956. Furthermore, the Chatbot's scope will encompass land-related laws, such as Community Benefits Agreement (CBA), Land Acquisition (LA), and Resettlement and Rehabilitation (RandR), thereby establishing a robust Management Information System tailored to the specific needs of the mining industry.*

Keywords: Chatbot, Mining Industry, Natural Language Processing, Regulatory Compliance, AI Automation

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