

Smart AI Healthcare Assistant For Skin, Hair and Health Awareness

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Abstract: *In the post-pandemic era, the demand for accessible and immediate healthcare information has surged. This paper proposes a "Smart AI Healthcare Assistant," a web-based conversational agent designed to provide preliminary awareness and advice regarding general health, skin care, and hair care. The system utilizes a hybrid Natural Language Processing (NLP) approach, combining deterministic keyword matching with fuzzy logic for common symptoms (e.g., acne, hair fall) and a pre-trained Transformer model (RoBERTa) for contextual question answering. The application is built using a decoupled architecture with a React.js frontend for an interactive user interface and a Flask-based backend API. Key features include symptom detection, immediate home remedy suggestions, and location-based recommendations for nearby clinics. This project demonstrates how lightweight AI models can be integrated into web applications to democratize basic health awareness.*

Keywords: Healthcare Chatbot, Natural Language Processing (NLP), React.js, Flask, RoBERTa, Transformers, Fuzzy Logic

