INCREASE CLINICIAN - PATIENT FACETIME

Submitted by

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Under the guidance of,

Dr. AKSHATHA Y

Assistant Professor-Selection Grade

in partial fulfillment for the award of the

degree of

BACHELOR OF TECHNOLOGY

IN

Computer Science and Engineering-Artificial Intelligence And Machine Learning

At

SCHOOL OF COMPUTER SCIENCE ENGINEERING

PRESIDENCY UNIVERSITY

BENGALURU

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PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report on Increase Clinician-Patient Facetime - An AI Powered Automated Patient Documentation and Prescription Software being submitted by R KESHAV, RAKSHITHA K T, S SRINIVAS, SHOVIN WILSON A W, PREM JE KALISTER bearing roll number(s) 20211CAI0080, 20211CAI0087, 20211CAI0109, 20211CAI0112, 20211CAI0187 in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering(Artificial Intelligence and Machine Learning) is a Bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled Increase Clinician-Patient Facetime in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering(Artificial Intelligence and Machine Learning)**, is a record of our own investigations carried under the guidance of Dr. AKSHATHA Y, **Assistant Professor**, **School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

The Increase Clinician-Patient Facetime project aims to revolutionize the documentation process in the medical field by leveraging artificial intelligence. This innovative system integrates automatic speech recognition (ASR) using OpenAI's Whisper model, natural language processing (NLP) for transcript analysis, and machine learning for disease prediction. By automating clinician-patient documentation, the project seeks to reduce the time spent on administrative tasks, enabling clinicians to focus more on patient care.

The pipeline begins with speech-to-text conversion using ASR, followed by intelligent parsing to identify and map symptoms to known medical datasets. The system predicts possible diseases based on symptoms and generates a comprehensive report, including prescriptions and recommendations. This report enhances decision-making and ensures accuracy. Through this project, we demonstrate significant advancements in clinical automation, improving efficiency and accuracy while maintaining patient trust.

Furthermore, the system is designed to continuously learn from new data, adapting to emerging medical trends and evolving healthcare practices. By integrating seamlessly with existing electronic health record (EHR) systems, it aims to provide a comprehensive solution that supports clinicians in their workflow without disrupting current practices. The overall goal is not only to streamline documentation but also to enhance patient outcomes by providing more personalized, timely, and precise care. Through these advancements, the INCREASE CLINICIAN-PATIENT FACETIME project has the potential to significantly reduce clinician burnout, improve healthcare delivery, and ultimately contribute to a more effective and efficient healthcare ecosystem.