



**AI-POWERED CHILD PROTECTION  
WITH CONTENT REDIRECTION  
PROJECT PHASE I REPORT**



*Submitted by*

**BAVYA SRI V                   (211161010)**  
**IVANJALIN A               (211161017)**  
**PRAVIN B                   (211161034)**  
**THAMIZHMANI V       (211161052)**

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**MAHENDRA ENGINEERING COLLEGE**

**(AUTONOMOUS)**

**Mahendhirapuri, Mallasamudram, Namakkal-637 503.**

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**MAHENDRA ENGINEERING COLLEGE**

**(AUTONOMOUS)**

**Mahendhirapuri, Mallasamudram, Namakkal-637 503.**

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA  
SCIENCE**

**BONAFIDE CERTIFICATE**

Certified that this project report “**AI-POWERED CHILD PROTECTION WITH CONTENT REDIRECTION**” is the bonafide work of **BAVYA SRI V (211161010), IVANJALIN A (211161017), PRAVIN B (211161034), THAMIZHMANI V (211161052)** who carried out this project work under my supervision.

**SUPERVISOR**

Mrs. M.JAYAPRIYA,M.E.,

**HEAD OF THE DEPARTMENT**

Dr.S.ANANTH,M.E.,MBA.,Ph.D

Submitted for the end semester Project Viva Voce Exam held on \_\_\_\_\_

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**INTERNAL EXAMINER**

**Date:**

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BAVYA SRI.V	(211161010)
IVANJALIN.A	(211161017)
PRAVIN.B	(211161034)
THAMIZHMANI.V	(211161052)

## ABSTRACT

Our work ensuring the online safety of children has become a paramount concern for parents and educators. The internet, while rich in educational and entertainment resources, also exposes young users to inappropriate content such as explicit material, violence, cyberbullying, and misinformation. Safe Screen is an AI-powered child protection solution designed to tackle this issue by offering real-time content analysis and instant redirection. Through the integration of advanced machine learning algorithms and natural language processing (NLP), the system continuously scans digital media, including text, images, and videos, across websites, social media platforms, and applications. Upon detecting harmful or unsuitable content, Safe Screen instantly intervenes, redirecting the child's screen to age-appropriate and pre-approved alternatives without interrupting their browsing experience. Parents and guardians can customize content filters according to age, content type, and specific preferences, ensuring a tailored protective environment. Additionally, Safe Screen provides detailed usage reports, allowing parents to monitor online behaviour and manage screen time more effectively. By combining proactive content moderation with seamless redirection, Safe Screen fosters a safe, enriching, and secure digital environment for children, empowering them to explore the internet responsibly while staying protected from harmful influences.

**Keywords:** *AI-powered safety, content redirection, real-time content filtering, machine learning, natural language processing (NLP), online safety, parental control, digital safety.*

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## **LIST OF ABBREVIATIONS**

RNN	Recurrent Neural Network
BPTT	Back Propagation Through Time
DFD	Data Flow Diagram