**EXPLORATORY EXAMINATION OF CYBERSECURITY-BASED PARENTAL CONTROL SYSTEMS AND TECHNIQUES**

Submitted in partial fulfillment of the requirements for the award of

Bachelor of Engineering degree in Computer Science and Engineering

By

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**SCHOOL OF COMPUTING**

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## INSTITUTE OF SCIENCE AND TECHNOLOGY

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**APRIL 2024**

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**BONAFIDE CERTIFICATE**

This is to certify that this Project Report is the bonafide work of **PRASHANT SHUKLA (40110987) and R. PRANEETH (40110982)** who carried out the Project entitled “**EXPLORATORY EXAMINATION OF CYBERSECURITY-BASED PARENTAL CONTROL SYSTEMS AND TECHNIQUES”** under my supervision from November 2023 to April 2024.

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### DECLARATION

I, **PRASHANT SHUKLA (Reg. No - 40110987)** hereby declare that the Project Work Report entitled **“PARENTAL CONTROL SYSTEM WITH CYBER SECURITY”** done by me under the guidance of **Mrs. SANTHIYA P, M.E.**, **(Ph.D.)** is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering Degree in **Computer Science and Engineering**.

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### 

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### ABSTRACT

The application enhances child safety and parental oversight by allowing parents to register and monitor their children's location through geofencing with boundary crossing alerts. It includes access to children's messages and call logs for communication supervision and tracks screen time to monitor usage.

In emergencies, children can send voice messages to nearby parents, which are then forwarded to the administrator for action and contacting emergency services if needed. The app's signup and login are secured with AES encryption and decryption, offering a complete safety network that reassures parents and provides a reliable method for children to seek help when feeling unsafe.

The study also emphasizes the vitality of studies in the area of online surveillance by parents, indicating a need for continuous improvement and adaptation to emerging challenges. The application aligns with this perspective by incorporating various features that contribute to a more effective and efficient system for Online Parental Guidance.

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**LIST OF ABBREVIATIONS**

|  |  |  |
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| **S. No** | **ABBREVIATION** | **EXPANSION** |
| 1 | ER | Entity Relationship |
| 2 | DFD | Data Flow Diagram |
| 3 | JDK | Java Development Kit |
| 4 | XP | Extreme Programming |
| 5 | SDLC | Software Development Life Cycle |
| 6 | AOSP | Android Open-Source Project |
| 7 | SDK | Software Development Kit |
| 8 | OS | Operating System |
| 9 | DVM | Dalvik Virtual Machine |
| 10 | ADT | Android Development Tools |
| 12 | UI | User Interface |
| 13 | JVM | Java Virtual Machine |
| 14 | JRE | Java Runtime Environment |
| 15 | AI | Artificial Intelligence |
| 16 | UML | Unified Modeling Language |

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