 **BATCH.NO-73**

**DEPARTMENT OF COMPUTER SCIENCE& ENGINEERING**

**SCHOOL OF COMPUTING**

**ABSTRACT SUBMISSION FORM**

**10214CS602 – MINOR PROJECT II**

**ACADEMIC YEAR: 2023-2024 SEMESTER: WINTER**

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| Title of the Project: |
| **Voice Control Home Automation** |
| **PROJECT SUPERVISOR:** |
| **Mr . S. GOPI** |
| aBSTRACT |
| *This study introduces a Voice-Controlled Wireless Smart Home System tailored to meet the needs of elderly and disabled individuals. Leveraging advancements in technology, particularly Arduino microprocessors and Android smartphones, the system enables remote monitoring and control of household appliances via voice commands. The primary objective is to enhance the quality of life for vulnerable demographics by providing them with an intuitive and accessible means of managing their home environment.The system comprises two main components: a voice recognition system and a wireless communication interface. Through the integration of Arduino microprocessors, home appliances are connected and controlled wirelessly via Bluetooth, facilitating seamless interaction with an Android application. Authentication protocols ensure secure access, allowing only authorized users to operate the system.*  *By employing voice recognition technology, users can effortlessly command the system to perform various tasks, such as turning devices on or off, adjusting settings, and activating emergency protocols. This intuitive interface reduces the reliance on traditional controls, making it particularly beneficial for individuals with limited mobility or cognitive impairments. The project emphasizes scalability, cost-effectiveness, and energy efficiency, making it accessible to a wide range of users. Furthermore, extensive research in the field of home automation and assistive technology informs the design and implementation of the system, ensuring alignment with existing best practices and addressing specific user needs.*  *Overall, the Voice-Controlled Wireless Smart Home System presented in this study represents a significant advancement in home automation technology, offering a practical and inclusive solution to enhance the independence and well-being of elderly and disabled individuals within their living environment.* *The Voice-Controlled Wireless Smart Home System benefits elderly and disabled individuals by providing intuitive control through voice commands, enhancing independence. Additionally, caregivers gain peace of mind with advanced safety features, while developers and researchers find valuable insights for further innovation in assistive technology.* |

**STUDENT PROJECT SUPERVISOR PROJECT CO-ORDINATOR**

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