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**ABSTRACT**

IoT involves extending Internet connectivity beyond standard devices, such as desktops, laptops, smart phones and tablets, to any range of traditionally dumb or non-internet-enabled physical devices and everyday objects. Embedded with technology, these devices can communicate and interact over the Internet, and they can be remotely monitored and controlled. With the arrival of driverless vehicles, a branch of IoT, i.e. the Internet of Vehicle starts to gain more attention. With the world developing in the sector of IoT (Internet of Things) there are many latest technological update which are based on that concept. The Wireless Video Surveillance Robot uses the similar concept in its implementation.

The Raspberry Pi Foundation provides Raspbian, a Debian-based Linux distribution for download, as well as third-party Ubuntu, Windows 10 IoT Core, RISC OS, and specialized media center distributions. It promotes Python and Scratch as the main programming languages, with support for many other languages. The default firmware is closed source, while an unofficial open source is available. Many other operating systems can also run on the Raspberry Pi. Other third-party operating systems available via the official website include Ubuntu MATE, Windows 10 IoT Core, RISC OS and specialized distributions for the Kodi media center and classroom management.

The raspberry pi controller is the core component in the design and structure of robot. The robot is controlled by controller through wireless network which has the radius of about 200m. The robot is mounted with high quality camera for real time transmission of data.

**Index Terms**-IoT, Robot, Surveillance, Raspberry Pi, Wireless

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**ABBREVIATIONS**

|  |  |
| --- | --- |
| IOE | Institute of Engineering |
| BEX  IoT  SOC  USB  CPU  LAN  HDMI  MPEG  GPU  GPIO  UART  FFMPEG | Bachelor in Electronics Engineering  Internet of Things  System on a Chip  Universal Serial Bus  Central Processing Unit  Local Area Network  High Definition Multimedia Interface  Moving Picture Experts Group  Graphics Processing Unit  General Purpose Input/output  Universal Asynchronous Receiver/Transmitter  Fast forward(Moving pictures Experts Group |
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