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## **Anti-Theft System for Library**

Ms. Monika Kute<sup>1</sup>, Sharva Salgarkar<sup>2</sup>, Bhimsingh Rathod<sup>3</sup>, Pranit Salunke<sup>4</sup>, Praveen Chate<sup>5</sup>

Professor, Department Computer Technology<sup>1</sup> Students, Department Computer Technology<sup>2,3,4,5</sup> Pimpri Chinchwad Polytechnic, Pune, Maharashtra, India

Abstract: Object detection and tracking could be an immense, vivacious however inconclusive and trending area of computer vision. Due to its immense use in official surveillances, tracking modules applied in security and lots of other's applications have made researchers to devise a lot of optimized and specialized methods. For validation purpose live input video will be taken for the same where book will be getting detected and it can be simulated same for real-time through external hardware added. External Hardware will be having RFID integrated to detect if book is issue or not. In the end we see the proper optimized and efficient algorithm for object detection and alert for security. Object Detection is computer vision technique used to detect object and identify its localization. This technique is not only used to identify the location but also to identify which type of object it is. This CV technique is used to detect objects in real time while maintaining the level of accuracy. By bringing some advancement in it, this system can be very helpful for people to keep track of their precious things or devices which are very expensive and need to be protected. Open CV (Open-Source Computer Vision Library) is a library of programming functions mainly aimed at real-time computer vision.

Keywords: Anti-Theft System

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