

Shelf scanning robot finds misplaced library books



Libraries, those bastions of off-line books, are increasingly looking to tech for ways to make life easier for both the staff and the visitors. Japan has tested a [digital inventory and reservation system](#), and an Android app can [flag incorrectly shelved books](#). With Autonomous Robotic Shelf Scanning (AuRoSS) technology, Singapore's [Institute for Infocomm Research](#) has developed a mobile robot that works alone at night, scanning the bar code of each book and compiling a list of incorrectly shelved or missing books.

Equipped with a combination of laser, Radio Frequency Identification reader, robotic arm and mobile body, the AuRoSS robot is fast, efficient and can submit data for review via Bluetooth or wifi. RFID barcode labels on books are starting to become more common as libraries increasingly use handheld scanning devices to help with re-shelving. The Institute's researchers initially wanted to use libraries' own maps of their shelf layout, but found them too unclear for a robot to read. Instead, AuRoSS works by using its arm and ultrasonic sensors to travel and maintain a set distance from the shelves.

We have already seen a [self-scanning robot for supermarkets](#). Where else could autonomous stock-checking bots be useful?

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