

Shelf reading Robot for Smart Libraries



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“Innovation in libraries”
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Planck Society Social
Sciences Libraries

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A photograph of a library aisle. A person with long dark hair, wearing a pink and white striped shirt and purple pants, is sitting on the floor in the center of the aisle, facing away from the camera. The aisle is lined with white bookshelves filled with books of various colors. The ceiling has recessed lighting. The overall scene is brightly lit.

**Huge manpower to track
and sequence books**

**No real-time availability
of book location**

SenserBot Solution

An autonomous mobile robot scanner locate and analyze RFID tagged books

- in unstructured environment
- with high accuracy
- without human intervention
- integrated with library management system

Benefits to Libraries

- Improves staff productivity
 - in item location
 - shelfreading
 - stocktaking
- Improve user experience
- ROI in 1-2 years time

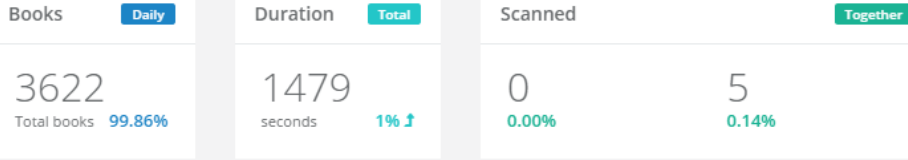
- **Completed trials**
- **Deploying for customers in Singapore**
- **Overseas expansion**
 - Customers
 - Partners



Multiple Views and Analysis

Dashboard view

SenserBot

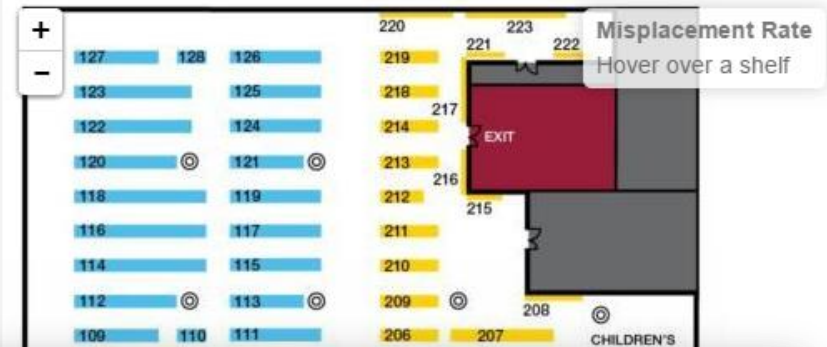


Details

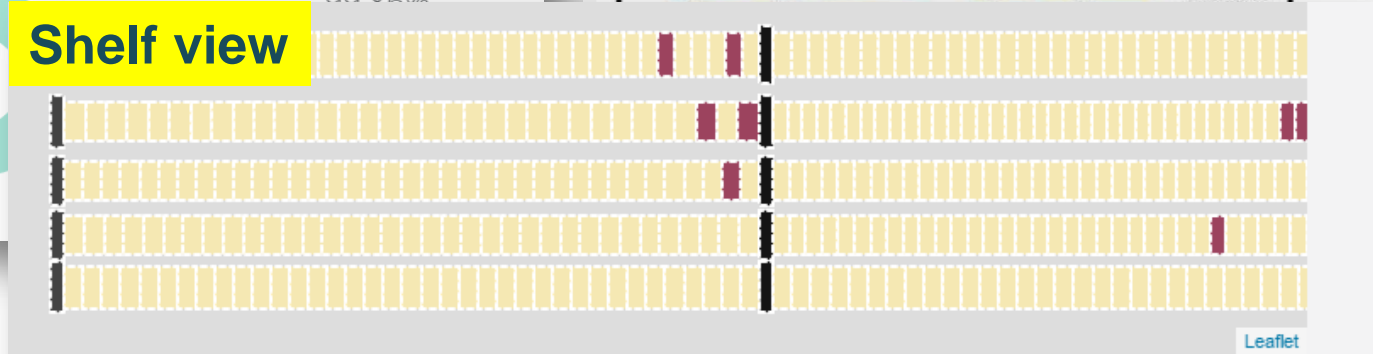
Categories
of results

Library view

SenserBot



Shelf view



Shelf 29

Show 10 entries

Search: The essential guide to h

	Book	CallNo	Side	Tier	Bay	Index	Type
9643	The essential guide to healthy healing foods	615.854 RET	1	1	1	36	MISSPLCD (104,1,2,1,19)

Media Exposure

The result is AuRoSS (autonomous robotic shelf scanning system), a robot that can navigate and scan library shelves for misplaced books. The not-at-all-humanoid robot wheels around library stacks, using RFID and laser mapping technology to scan shelves with 99 percent accuracy. It then produces a report of missing and out-of-sequence books that can be given to a staffer for easy re-shelving..



A mobile robotic system is in development to take over the menial job of patrolling the stacks and inventorying the books.



Automated robot that scans library shelves using laser mapping and radio tags can ensure no book is misplaced again.

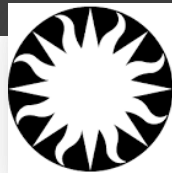
sciencedaily.com



One of the biggest jaw-droppers was the new Shelf-Reading Robot, created with the help of the A*STAR Research team.



This robot librarian locates haphazardly placed books. It's the next best thing since the Dewey Decimal System.



The robots have now become shelf-aware.



Contact us for more
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