

[ilab]

INNOVATION LAB



TOWARD

EXCELLENCE

inspire • innovate • impact



AIT
Asian Institute of Technology



AIT Solutions

Vision

“ *Advance innovation & develop collaborative solutions for social & technological development* ”



A creativity hub for students, researchers, innovators, and entrepreneurs



Venue to collaborate with other students or entrepreneurs and be mentored by experts



Develop sustainable and scalable solutions for the benefit of the industry and society

Do you have an innovative idea?

[ilab] has developed a mobile application called ilab ideas app for innovators, students, researchers to share, collaborate, and help accelerate their ideas to become industry solution.

Download now!



[ilab] at AIT Solutions combines knowledge and research with community scale by making local communities a part of the innovation process and supports innovation in following aspects:

Innovation in Products:

Using new technology and ideas to serve the hard to reach and the most vulnerable communities.

Innovation in Services:

Improving our ability to target and engage resources to monitor and manage results.

Innovation in Processes:

Creating processes that support the efficient and transparent creation, adaption or uptake of products.

Innovation in Partnerships:

New collaborations with other innovation centers, development agencies, civil society, public and private sectors.

Programs and Activities



Collaboration for Innovation Events

Events aim to explore & initiate partnerships amongst academia, industries and community to accelerate innovation.



Innovative Idea Competitions

Students present their most creative ideas with potential to be industry solutions.



Hackathons and Innovative Market Place

Platform for students and professionals to brainstorm on different ideas that can be converted into mobile, software apps, & products.



Camps and Workshops

Innovation and Leadership Camp open to top undergraduate students in Asia to nurture their leadership and innovative skills.

Ongoing Innovations



Can Crusher Robot

It facilitates on the spot waste segregation by detecting whether the item inserted is a can or not. It compresses the can size to 20% making it easier to dispose, further reducing waste logistic costs. It also has a built-in reward system connected to a mobile app that generates points for the users through QR code.



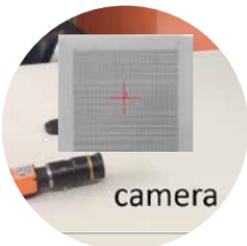
Plastic Bottle Shredder

Plastic bottles, when not properly recycled pose a huge problem for our environment. Some plastic bottles end up in landfills which take centuries to break down or in the ocean which can endanger sea animals. Plastic bottle shredder is a reverse vending machine that shreds plastic bottle in seconds, preparing it for recycling, and also gives reward points to users.



Drone-based Construction Monitoring

By using the aerial images captured in Drones, [ilab] team can use the collected data to detect any discrepancies and deviations from construction plans and policies. This will allow project participants to address problems before and as they arise. They also serve as permanent record and as built information for conflict resolution and information retrieval for maintenance.



Moire Camera

[ilab] is developing its own Moire camera for Structural Engineers to record fine grid patterns applied to various structures and deformations. Deformations of structures are measured by applying a fine grid pattern to the surface and photographing this in white light with a specially modified 35 mm camera.



Tele-rehabilitation Robo-Arm

Robot-aided rehabilitation and tele-rehabilitation systems design with sensorless torque control helps a patient who needs to undergo arm therapy recover quickly through the aid of this haptic-based machine.



Haptic White Cane

This haptic-based walking stick is designed to help the visually impaired to explore their environment through the sense of touch and hearing. Haptic White Cane detects environmental information (i.e.: obstacles or pits in the ground) through ultrasonic visualization and conveys it to the user by haptic and auditory feedback.



Color Identification Mobile App for Visually Impaired

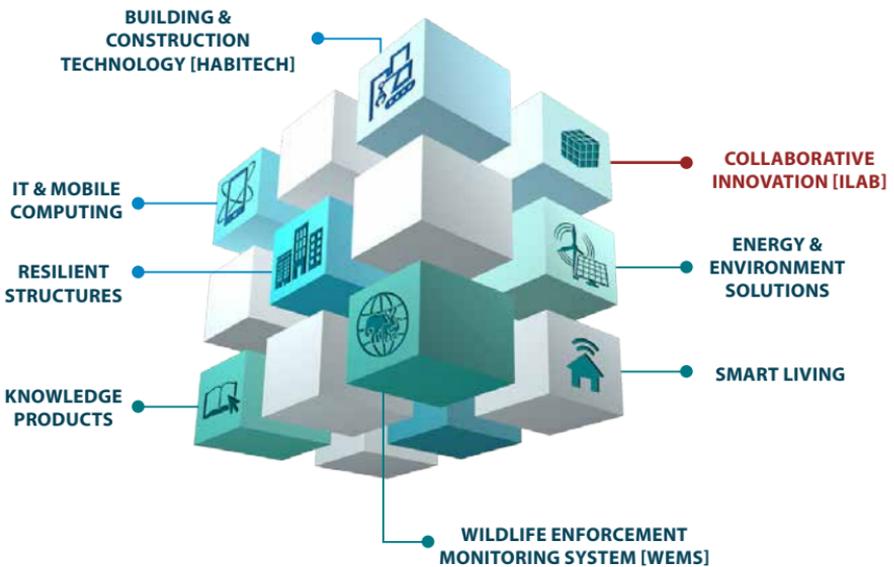
This Mobile App for the Visually Impaired called WAWTA (Thai word meaning eye expression) was developed with an integration of haptic and auditory sensories to help blind people recognize color by placing their mobile phone or tablet in front of the object they want to identify the color. It may seem too simple to those who can see, but for the blind it is a very useful app.

and many more...

AIT Solutions

AIT Solutions (AITS) was established at the Asian Institute of Technology (AIT) with the aim to increase the application of science and technology for the socio-economic development in Asia. The mission of AIT Solutions concentrates on establishing higher scientific, engineering, and technological standards; developing innovative solutions; and collaborating with public and private organizations by providing integrated solutions based on AIT's research, knowledge, and expertise.

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