



DreamSpace Academy  
Co-Creating The Dreams

# Who are we?

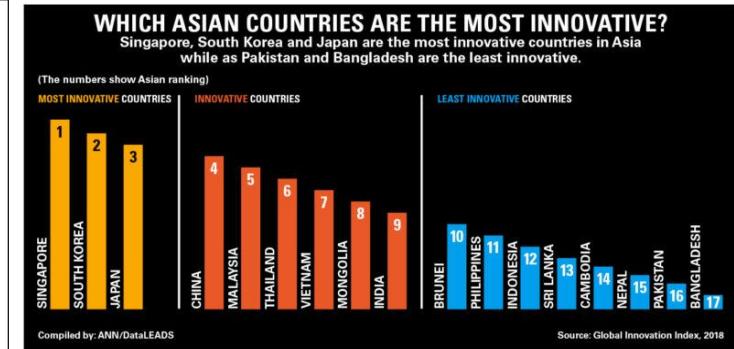
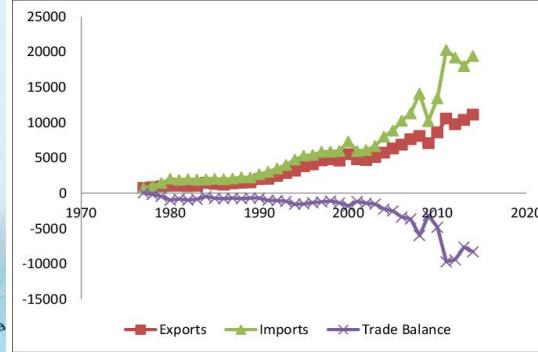


**DreamSpace Academy** is a **Community Innovation Center** to tackle authentic local socio-economic and environmental challenges using **Project & Challenge Based Learning**

# Why do we do?

One of the **least innovative** country in **Asia**

In 2017, Sri Lanka exported \$12B and imported \$21.1B, resulting in a negative trade balance of \$9.1B.



**Locals** should solve **local** challenges

# What do we do?

Our mission is to empower creative minds through **Maker Education**, to create innovative solutions using **Open Innovations**, and ultimately leading them to become successful **Social Entrepreneurs**

# What are we?

We are a **Non-profit Social Enterprise** that keeps the balance between the **Social Mission** and the **Business Venture**, to achieve **Sustainable Development Goals** and empower the **Underprivileged Communities**, with the help of international & local organisations and individuals.

# How do we do? | DreamSpace Lifecycle



## Maker Education

Our academic operation for project based learning with multidisciplinary workshops to build practical skills



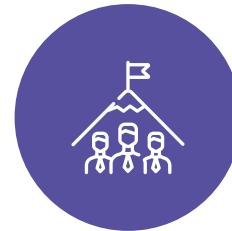
## Community Innovation

Our research and development operation for innovating local solutions to tackle authentic local challenges



## International Collaboration

Our co-creation operation with international partners to expand our visibility and knowledge base

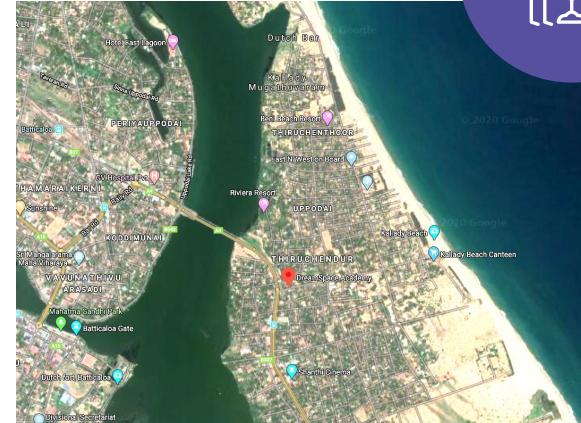


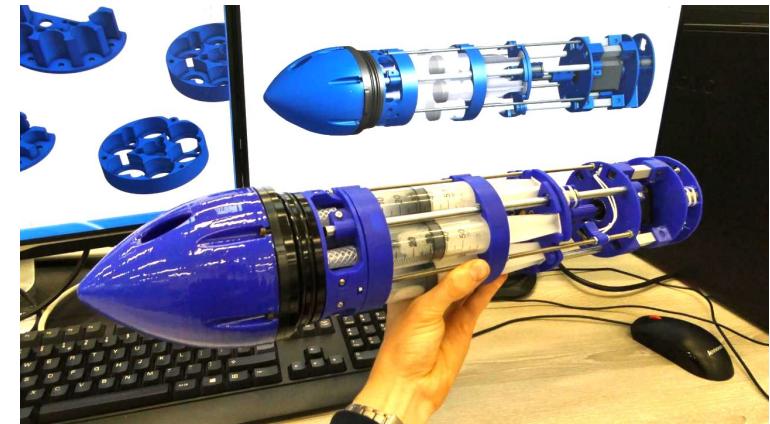
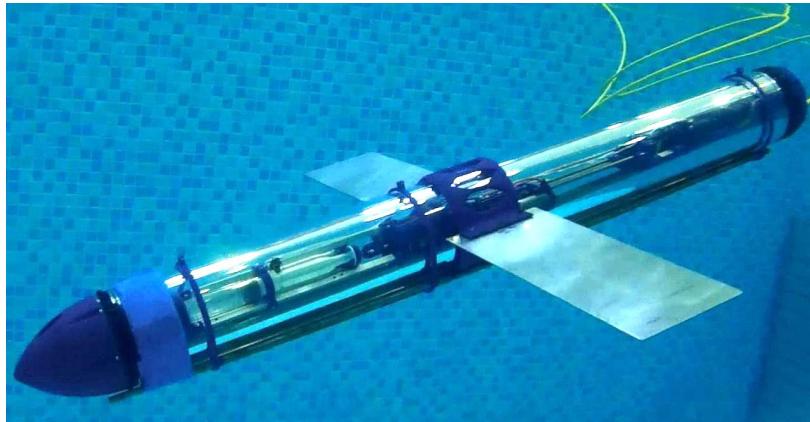
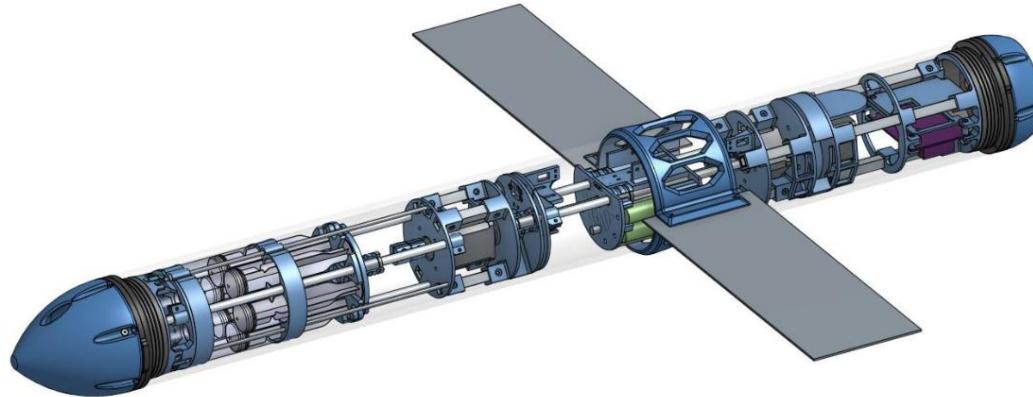
## Social Entrepreneurship

Our business operation to productize our local solutions for creating socio-economic development



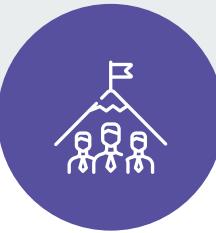
# Shanjeevan





# Shanjeevan







**Syzygium cumini (Java Plum) Seed Extract - Mediated Green Synthesis of Iron Oxide Particles for the Removal of Cadmium Ion in Wastewater**





**Maker Education**

# Maker Education

## Electronics Lab

For those who are fascinated by robots, to develop practical skills for building anything from circuits to humanoid robotics

### Workshops

- How to design, prototype and manufacture digital & analog electronic circuits (Circuits)
- How to develop a firmware for embedded microcontrollers (Firmware)
- How to design, build and program robotic systems (Robotics)
- How to design wired and wireless communication systems (Networks)
- How to build automation systems with sensors and actuators (Automation)



Source: dreamspace.academy

# Maker Education

## Software Lab

For those who crave for digital adrenaline, to gain practical experience on coding anything from apps to cloud computing

## Workshops

- How to code software applications for desktop, web and mobile (Apps)
- How to design, integrate and maintain databases (DBMS)
- How to build websites with content management system (CMS)
- How to deploy and maintain web servers (DevOps)
- How to develop machine learning & deep learning algorithms (Data Science)



Source: dreamspace.academy

# Maker Education

## Mechanics Lab

For those who shift their brain gears, to gather practical skills for anything mechanical design to digital fabrication

### Workshops

- How to do high precision & manufacturable mechanical designs (CAD)
- How to produce bioplastic products with additive manufacturing (3D printing)
- How to make wood & metal products with subtractive manufacturing (CNC milling)
- How to fabricate intricate designs in wood, plastic, paper, fabric (Laser cutting)
- How to make wooden & metal parts with power tools (Woodworking & Metalworking)



Source: dreamspace.academy



# Maker Education

## Business Lab

For those who have entrepreneurial mindset, to build practical knowledge for maximizing growth of the business venture

### Workshops

- How to design user centric solutions (Design Thinking)
- How to develop sustainable financial and business modeling (Business)
- How to develop B2B and B2C funnel (Sales)
- How to create startups from innovative ideas (Entrepreneurship)
- How to raise funds or investments for a business venture (Investment)

Source: dreamspace.academy



# Maker Education

## Art Lab

For those with genuine creative imagination,  
to build practical skill set for composing  
anything from photographs to rhythms

## Workshops

- How to compose and play music with instruments (Music)
- How to capture everlasting moments with photos (Photography)
- How to map stories with narrative experiences (Storytelling)
- How to present stories, ideas and facts with short films (Filmmaking)
- How to make tiny sculptures on rice (Microart)



Source: dreamspace.academy

# Maker Education

## Bio Lab

For those who want to get their hands wet with BioHacking, to build practical dexterity on BioTechnology

### Workshops

- How to extract, sequence and edit DNA of E.coli bacteria (Genetics)
- How to build a Bioreactor to culture microorganisms (Bioreactor)
- How to brew probiotic drinks by fermenting Hibiscus (Culture)
- How to produce alternative superfood from Cyanobacterias (FoodTech)
- How to culture mushrooms for sustainable materials (Mycology)



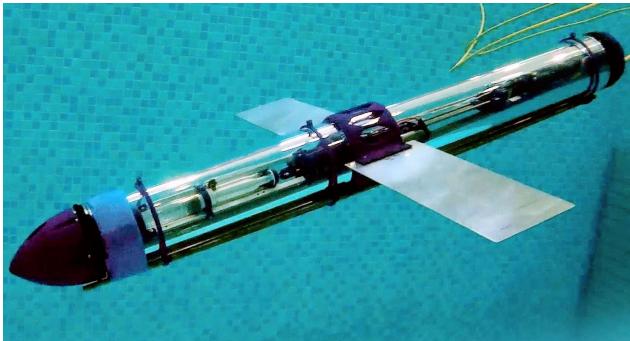
Source: dreamspace.academy





## Community Innovation

# Community Innovation

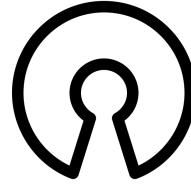


Source: dreamspace.academy, hackaday.io

# Community Innovation - Prototype To Production



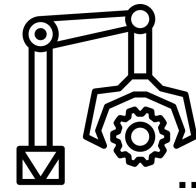
**Environmental  
Sustainability**



**Open  
Innovation**



**Research &  
Development**



**Local  
Manufacturing**



## International Collaboration

# International Collaboration

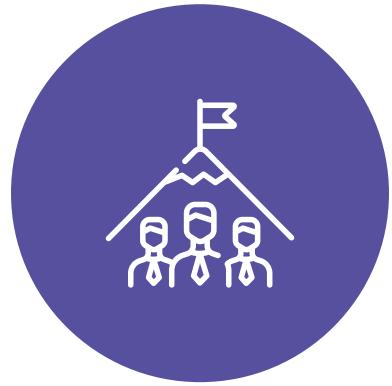


Source: dreamspace.academy

# International Collaboration



Source: [greenbuzzberlin.de](http://greenbuzzberlin.de), [globalinnovationgathering.org](http://globalinnovationgathering.org), [motionlab.berlin](http://motionlab.berlin), [aracreate.com](http://aracreate.com), [bookbridge.org](http://bookbridge.org), [troublemaker.site](http://troublemaker.site), [dofe.org](http://dofe.org), [siwi.org](http://siwi.org), [berlin.sciencehackday.org](http://berlin.sciencehackday.org)



# Social Entrepreneurship

# Social Entrepreneurship



Source: dreamspace.academy, terrace,dreamspace.academy

# Social Entrepreneurship - Idea to Impact Business



## Community Business

Digital Nomads, Co-Working,  
Urban Farming, Smart  
Mobility



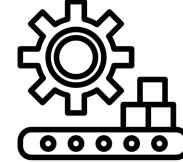
## Socio-Economic Development

Employment and Skill  
Development



## Impact Investment

Startup Accelerator,  
Incubator, Investors



## Mini Factories

Regional Products, Conscious  
Consumerism

# Co-Creating The Dreams



Source: dreamspace.academy

# Co-Creating The Dreams



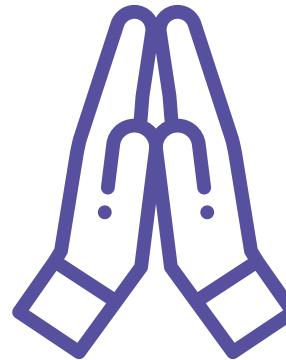
Source: dreamspace.academy

# Co-Creating The Dreams



Source: dreamsphere.academy

# Thank You



**Aravindh Panch**  
Co-Founder | Director of Innovation  
[ara@dreamspace.academy](mailto:ara@dreamspace.academy)

**Kishoth Navaretnarajah**  
Co-Founder | Director  
[kishoth@dreamspace.academy](mailto:kishoth@dreamspace.academy)

**DreamSpace Academy**  
Batticaloa, Sri Lanka