



IIT GANDHINAGAR INNOVATION AND ENTREPRENEURSHIP CENTER

IIEC

Mission: Foster techno-entrepreneurship through innovative and creative thinking using interdisciplinary approach.

Objective: Incubate and nurture startups to create sustainable, commercial and social impact.





Dr Harry Yuklea, Technion, delivering a lecture on innovation

ABOUT IIEC

IIT Gandhinagar Innovation and Entrepreneurship Center (IIEC) is a company incorporated under section 8 of the Companies Act, 2013. Promoted by IIT Gandhinagar, it is envisioned as a service arm of IIT Gandhinagar to implement the overall strategy of incubation, IP management, and commercialization. It is implementing entrepreneurship and innovation development programs at the Institute.

The company has received funding from the Department of Science and Technology, Government of India to establish a Technology Business Incubator. It is also recognized as a Nodal Center by Government of Gujarat to implement its program for promoting Startup/ Innovations.

It is creating around 10,000 sq ft furnished office space for startups, tinkering labs, Prototype development center etc. within the campus of IIT Gandhinagar.

FRAMEWORK FOR ECOSYSTEM DEVELOPMENT

Committed to make a proactive and sustainable innovation ecosystem, Institute came up with Intellectual Property policy and Incubation policy. The long term vision of the institute is to support and nurture innovation and entrepreneurship among faculty, researchers and students. The IP policy creates an effective and user friendly system to evaluate, protect and appropriating IP created at the Institute while the explicit goal of incubation policy of is to “nurture high growth technology startups that generate commercial and social impact”.

CURRICULUM INTERVENTIONS

The Institute offers an **Engineering Entrepreneurship** elective course to introduce entrepreneurship skills to

students, offered by accomplished practitioners such as **Mr Rajen Jaswa** and **Mr Arnab Sarkar**.

DEFERRED PLACEMENT

The Institute introduced a deferred placement policy to encourage students to seek alternate career paths, such as entrepreneurial ventures, higher education, etc. Nine students among the graduating batch of a little over 100 students in 2015 opted for this option to pursue their entrepreneurial ambitions. The Institute has created a structured mentorship program to prepare these students in developing a comprehensive business plans.

AWARENESS AND CAPACITY BUILDING

To build the capacity for incubating quality companies, Incubation Center organizes talks, conferences and workshops. It organized a **Best Practices in Technology Incubation** workshop aimed at faculty and administration to help identify best practices in incubating companies and formulating policies related to it. Regular talks and workshops by industry experts are offered on technology commercialization, intellectual property awareness, prior art search, monetization of IP, etc

- **Intellectual Property awareness Workshop** by **Mr Gouraj Yadav** and **Mr Ojas Sabnis** of Hourglass Research.
- **Prior art search** by **Ms Mita Sheikh** of Krishna and Saurashtri Associates.
- **Monetization of IP** by **Mr Akash Bhavsar** of SkyQuest Technology Group.
- Short course on **Social Entrepreneurship** by **Mr Ketan Deshpande** and **Mr Santosh Huralikoppi** of FUEL Foundation.
- Talk on **legal aspects of starting business** by **Adv. Manasvi Thapar** of Candour Legal.
- **Innovation, Invention & Entrepreneurial Thinking**, by **Prof Mir Imran**, Chairman,

InCube Labs, USA.

- Workshop on **Personal Competency Development for Entrepreneurs** by **Dr Meenakshi Kirtane** founder member of Maanas.
- Talk on **Technology Entrepreneurship** by **Ms Elena Donets** from StarTau, Tel-Aviv University and **Mr Danny Hadar**, VC Peregrine, Israel.
- Short course on **Economics of Innovation and Entrepreneurial Finance** by **Dr Harry Yuklea**, Technion, Israel.

SUPPORT PROVIDED BY IIEC

Apart from space and development infrastructure, the incubation center provides mentoring, access to IITGN labs and other infrastructure, connectivity to professional investors, business networks and seed fund. IIEC also connects the entrepreneurs to professionals for legal, intellectual property, accounting and other compliance related guidance and services.

Mentor Pool: The Institute has created a pool of mentors from across the globe to advice and support students, innovators and incubatees.

STARTUP INTERNSHIP PROGRAM(SIP)

IITGN is committed to provide exposure of different work environments to its students as well as support and nurture start-ups promoted by its alumni and students. The Institute started Internship program where students are sponsored to work as interns in the startup companies founded by IITGN students and alumni during semester breaks. The program helps students gain experience of working in a highly evolving and dynamic startup environment. All the selected students receive a stipend from the Institute during the period of internship.

CURRENT STARTUPS

STARTUP INITIATIVES BY OUR ALUMNI AND STUDENTS

Starting with the first graduating batch in 2012, 35 alumni and students have launched 15 different startups. Seven of them were incubated at IITGN while others leveraged resources and mentorship through virtual programs. A brief profile of the startups is presented below.

CRETIF

Cretif is founded by **Akash Keshav Singh, Harsh Gupta** and **Sushilkumar Shisode**, class of 2015, with the aim of improving road safety. Cretif has built an application which collects data from the vehicle to assess and help drivers improve their driving. It was declared the winner for Ahmedabad Chapter of International Business Plan Competition organized by TIE in collaboration with Rice University. www.cretif.com

UrbanHunt

UrbanHunt is a gamified, micro-reward based engagement platform where brands can run incentivized campaigns to unlock consumer insights and drive peer-powered marketing using comprehensive analytics by collecting shopping preferences and key data at every touch-point. Urbanhunt is promoted by **Jinesh Shah** and **Sumit Deshmukh**, class of 2014. www.urbanhunt.in

4Dea

4Dea started by **Dhyey Shah, Eepsit Tiwari, Preet Shah** and **Ankit Pandole**, class of 2015, is a technologically driven start-up in the field of virtual reality and interactive media. It creates virtual walkthroughs of real places and real events by capturing 360 degree spherical panoramic images. It also provides an information layer which can be used to embed photos, videos and text that can be used to highlight distinctive features in 3D space. www.4dea.com

whitepandâ

Founded by **Roshan Agarwal**, class of 2017 a current student. Whitepanda is a platform wherein businesses and individuals can easily order content, including articles, blogs, press releases, social media posts, web content and product descriptions. The content is written by the most relevant writer, selected from a large pool of writers who are signed up on the platform. www.whitepanda.in



Geo-Carte is working in the field of non-destructive geophysical exploration with the objective of providing the innovative approach for subsurface investigation using Ground Penetrating Radar (GPR). It is founded by **Silky Agarwal** of M Tech class of 2015. www.geocarte.in

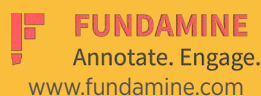
STARTUPS PROMOTED BY ALUMNI OUTSIDE IITGN



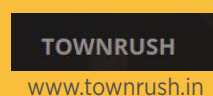
www.courtside.in



www.getflutter.com



Annotate. Engage.
www.fundamine.com



www.townrush.in

PAST STARTUPS



CUBEIT

Founded by **Sarthak Jain, Prathamesh Juvatkar** and **Nithin Gadiparthi**, class of 2012, cubeit is a technology innovation start-up. It is a platform that eliminates the need of multiple apps while accomplishing a single task with seamless access to data and software across all devices. Recently it received funding from Accel Partners and Helion Venture Partners. www.cubeit.io

TinkerTank

TINKERTANK

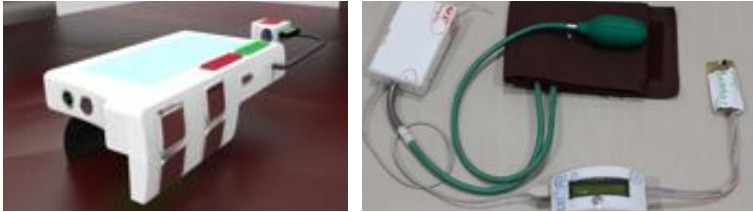
Founded by **Keshav G.**, class of 2012, Tinkertank's product enhances the productivity of women workers and improves their health by providing them with a machine named Doopica to produce incense sticks for which an Indian patent has also been filed. The company received several awards, including Gandhian Young Technological Innovation Award and ISB 5th iDiya National Social Venture Competition. Keshav has now exited and assigned the technology to IITGN.

INTELLECTUAL PROPERTY ASSETS

INTELLECTUAL PROPERTY

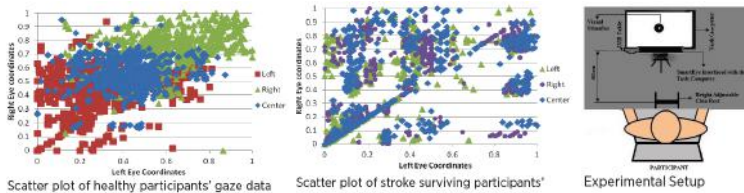
During the year 2015-16, a total of 9 invention disclosures were generated by the faculty members out of that 5 were approved for filing patent at the Indian Patent Office. We also filed a PCT application for an invention developed by **Prof Uttama Lahari**, in collaboration with **Dr Anirban Dutta**, INRIA France and **Dr Abhijit Das**, a Senior Consultant Neurologist from Kolkata.

Some of the technologies available for licensing



ONE TOUCH DOCTOR

This microcontroller based system is able to measure multiple physiological parameters, e.g., Pulse Rate (PR), Saturation of peripheral Oxygen (SpO2), Perfusion Index (PI), Blood Pressure (both Systolic and Diastolic) and blood Hemoglobin level (Hb). This novel non-invasive cost-effective, comprehensive and user-friendly device uses multi-sensory detection and fusion approach for measuring different physiological parameters.

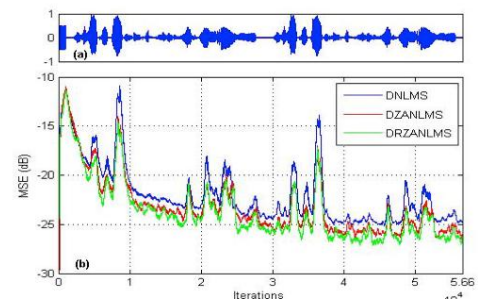
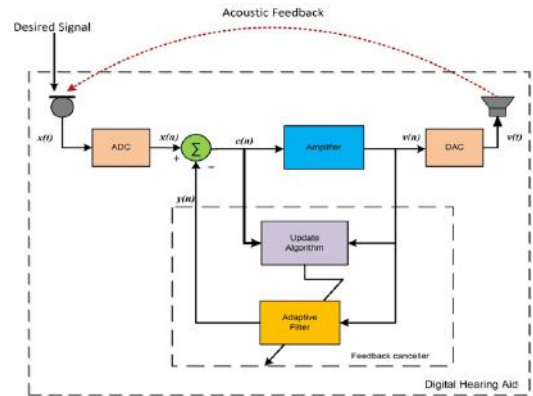


EYE TRACKING BASED DIAGNOSTIC SYSTEM

It is a non-invasive system that uses an eye tracker for diagnosing a patient suffering from neurological disorders such as, stroke. The system creates a human machine interface (HMI) that integrates low cost eye tracker for detecting one's response in terms of eye movement. The eye tracker monitors various eye parameters, and if it detects deviation in the patient's engagement to the task evident from the eye parameters, it sends a feedback signal which is detected through sensors and output is provided on the computer screen.

A SIMPLE AND RELIABLE METHOD FOR DETECTION OF ORGANOPHOSPHORUS HERBICIDES

The method uses nanobiocatalyst for detecting organophosphorus herbicides. The nanobiocatalyst comprises a laccase enzyme immobilized on silica coated magnetic iron oxide nanoparticles that can be coated on a strip. It can be used by agro-industries in testing fruits and vegetables before exporting, water quality monitoring etc.



A SYSTEM AND METHOD FOR FEEDBACK CANCELLATION IN DIGITAL HEARING DEVICES

This invention addresses the acoustic feedback in digital hearing devices which acoustic badly affect the quality of sound. The invention provides a system, for feedback cancellation in digital hearing devices that, facilitates optimal feedback cancellation using sparsity of the feedback path.

A WALKING AID SYSTEM FOR A PARKINSON'S DISEASE AFFECTED PERSON

The intelligent walking stick is designed for its use by Parkinson patient. This is capable of sensing the possibility of freezing of gait from the patient's hand movement and stride length. Subsequently, the system will provide visual & auditory cues along with vibratory cue to the patient before the actual freezing takes place thereby helping to prevent freezing of gait. Thus the patient will be independent while moving thereby ensuring safety and a sense of well-being to the patient.

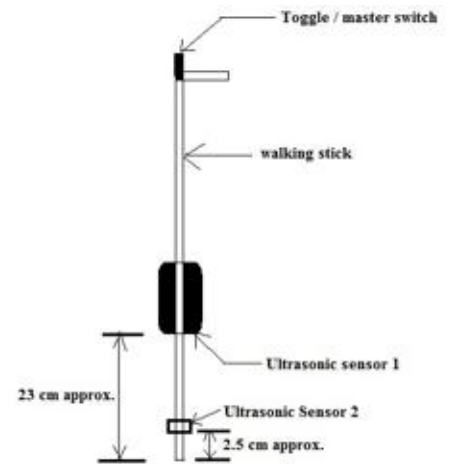


Fig. 4