SmartX Health, 2022
A IISc-Siemens hackathon

A hackathon for students and project staff of IISc only

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Reimagine the future of geriatrics, health & safety for MSME and healthcare sectors.

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SmartX for Health – Hackathon @ IISc Bangalore

Context

- A Siemens Research and Innovation Ecosystem Initiative for India.
- "**SmartX for Health**" Hackathon will be conducted at the Centre for Product Design and Manufacturing (CPDM), Indian Institute Of Science (IISc), Bangalore.
- Foster curiosity and technical vigor amongst participants at IISc for developing technology solutions pertaining to health, safety and sustainability in the MSME & healthcare industries.
- **T**, **IT** and **Corporate Social Responsibility (CSR)** collaboration

Themes

Geriatrics
Aging in a technologically advanced world

Workplace Health and Safety

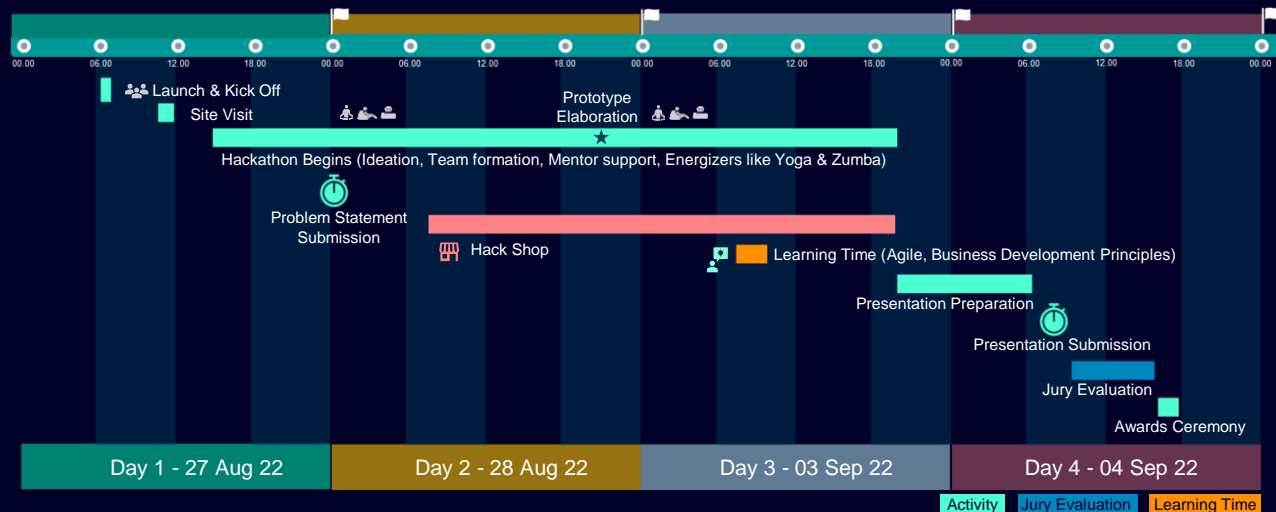**Health and Sustainability**

Technology

- IoT
- Data Analytics
- Cloud
- Smart Wearables
- Wireless & Sensors
- & many more….
- Virtual Reality and more…
- Artificial Intelligence
- Embedded Systems
- Blockchain
- Cyber Security

Schedule

Day & Night Event

4 Days
2 weekends

- Launch & Kick Off
- Site Visit
- Prototype Elaboration
- Hackathon Begins (Ideation, Team formation, Mentor support, Energizers like Yoga & Zumba)
- Problem Statement Submission
- Hack Shop
- Learning Time (Agile, Business Development Principles)
- Presentation Preparation
- Presentation Submission
- Jury Evaluation
- Awards Ceremony

| Day 1 - 27 Aug 22 | Day 2 - 28 Aug 22 | Day 3 - 03 Sep 22 | Day 4 - 04 Sep 22 |

Activity | Jury Evaluation | Learning Time

What Happens after the Hackathon

- Winning ideas will be sponsored for next stage prototyping etc. via the CPDMED TBI at CPDM, IISc.
- The ideas will be supported for entrepreneurship from realization through to commercialization.

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It's an opportunity to turn your ideas into reality!

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What's in it for you?

There is a lot in store for winners of the hackathon…

- Attractive monetary awards for top three winners
- Opportunity for top ten teams to develop their idea into a proof of concept and Minimum Viable Product in a 90-day post-hackathon challenge
- Funding for top six teams of the 90-day challenge at IISc's CPDMED TBI (https://incubator.cpdm.iisc.ac.in)
- A great opportunity to turn your idea into a startup!

Upcoming: the official hackathon website will be live soon.

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Begin your early exploration around the following hackathon themes

Geriatrics: explore and develop solutions for geriatric health, safety and mobility

- Healthy aging: community solutions and measures for healthy and safe aging
- Transport and mobility solutions: for greater independence of the aged or disabled
- Smart applications and wearables: for preventive measures, monitoring, and remote assistance at home/work
- Cognitive disabilities: solutions for early detection and easy management of Alzheimer's, Parkinson's, Dementia and other areas of cognitive decline
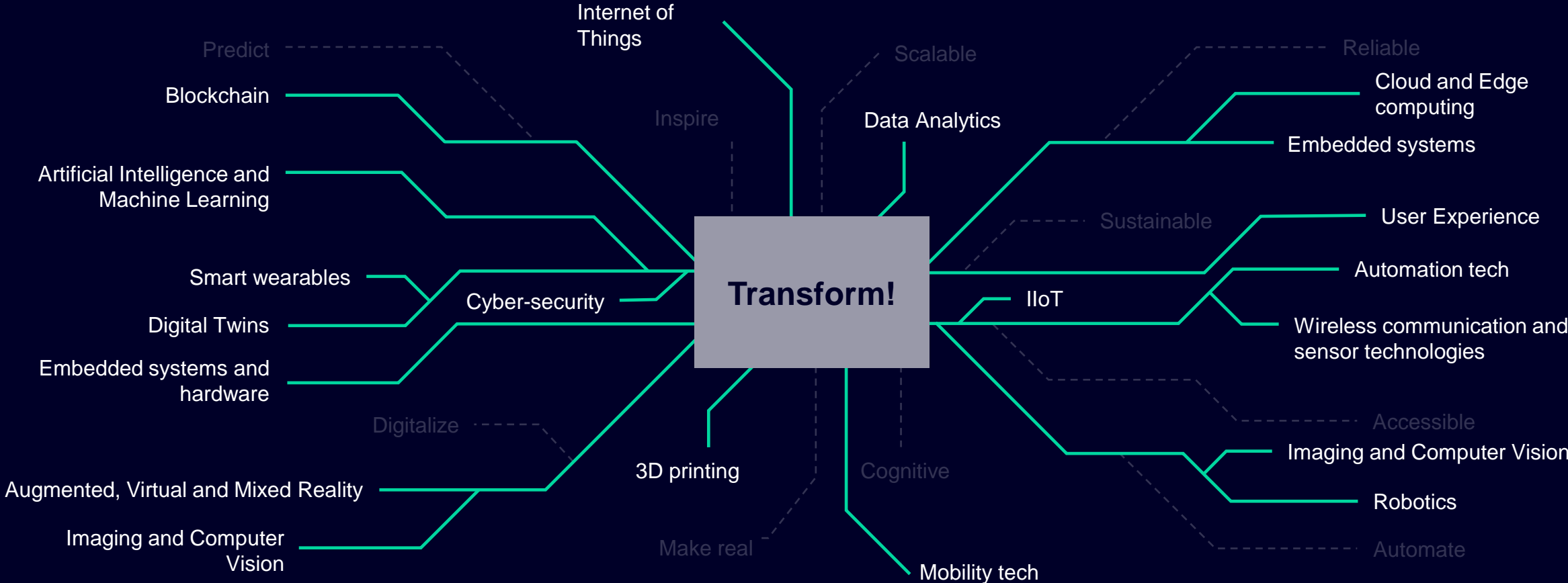
Workplace health and safety in the MSME sector

- Prevention of health hazards
- Addressing workplace contamination & ensuring social distancing
- Predictive maintenance for accident prevention
- Sustainable waste management

Health and sustainability in the healthcare sector

- Pollution control
- Overcrowding
- Medical/bio waste recycling & disposal
- Health and safety of sanitation & healthcare workers

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Technology you may use (not limited to…)

Internet of Things

Data Analytics

Blockchain

Artificial Intelligence and Machine Learning

Smart wearables

Cyber-security

Digital Twins

Embedded systems and hardware

Augmented, Virtual and Mixed Reality

Imaging and Computer Vision

3D printing

Mobility tech

IIoT

Transform!

Cloud and Edge computing

Embedded systems

User Experience

Automation tech

Wireless communication and sensor technologies

Imaging and Computer Vision

Robotics

Predict · Scalable · Reliable · Inspire · Sustainable · Digitalize · Cognitive · Accessible · Make real · Automate

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Key dates and timelines

Hackathon phase 1: Activities will include visit to hospitals, elderly care centers and MSMEs to observe and identify problems and opportunities. <u>This is a 24hr hackathon activity</u> and teams must assemble at Satish Dhawan Auditorium across following dates and timelines.

- o Start: August 27th, 7:30AM
- o End: August 28th, 8:00PM

Hackathon phase 2: Activities will include ideation, prototyping and pitch to Jury. This is a 24hr hackathon activity and teams must assemble at MMCR, CPDM across the following dates and timelines.

- o Start: September 3rd, 7:30AM
- o End: September 4th , 8:00PM

Post-Hackathon: The hackathon will be followed by a 90 days challenge.

- o Top ten teams of the SmartX Health hackathon will receive support to develop ideas into proof of concept (POC), and POC into minimum viable product (MVP)
- o Top six teams will then be nurtured and financially supported for translation and incubation at CPDMED TBI

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Good luck!

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