



Picture: Disinfecting Robot Model (*)

Towards Disinfecting Robots for Public Places

Team Members

1. Mohammad Zakaria Haider
2. Abul Al Arabi
3. Lamia Iftekhar
3. Celia Shahnaz
5. Shaikh Anowarul Fattah

Project Mission and Vision

The coronavirus epidemic is currently raging through Bangladesh at the community transmission level. Although the country is in lockdown for several weeks according to WHO guidelines, prolonged quarantine will be causing complex humanitarian crises and is mostly likely not to be adopted. As opening up the economy is considered sooner than epidemiologically ideal, we must do our best towards devising strategies and finding sustainable measures to mitigate the spread of virus in order to avoid a second wave of epidemic. **With this vision, we propose a three-stage project to design, develop and deploy robotics solutions to sanitize and disinfect public places of the country, while encouraging and preparing the youth to actively embrace local and sustainable innovations in robotics and automation.** Guiding young robotics enthusiasts towards best practices in humanitarian technologies (through online and offline training sessions) and motivating them towards designing custom-made solutions for effectively sanitizing public places (through a Hackathon), we will enable the development and deployment of the best design for disinfecting robots for public places in Dhaka working with local stakeholders. The project will culminate through a thorough impact assessment and sharing of our insights and recommendations from the implementation for further wide scale adoption in analogous communities.

STAGE I: TRAINING

Timeline: June'20 - September'20

Objective: Young robotics enthusiasts (university students) will be trained on existing solutions, best practices, problem domain and other concepts such as SROI through interactive learning sessions.

Deliverables : A series of minimum of five sessions - one to two hour long online sessions (webinars, online classes etc.) and supplementary offline sessions.

STAGE II: HACKATHON

Timeline: October'20

Objective: Registered teams of university students from all around the country will go through a secondary phase of special training with specific kits. Then, a day-long hackathon will be organized at the end of which winning designed are identified and acknowledged.

Deliverables :

- a. Successful conduction of Hackathon
- b. Decision on the winning design.
- c. A detailed report of the event along adequate with descriptive summary of the projects.

STAGE III- DEPLOYMENT

Timeline: November'20 - May'21

Objective: We will work in collaboration with the winning team to scale and develop the design further and then collaborate with local stakeholders including the Dhaka North City Corporation to implement it in public places in Dhaka – bus stops, tea stalls and market places and school premises.

Deliverables :

- a. At least one fully functional system is developed.
- b. The system is implemented in at least one public place in Dhaka for an extended period of time.

Supporting Organizational Units