

# UNMANNED GROUND VEHICLE FOR COVID-19 WASTE MANAGEMENT



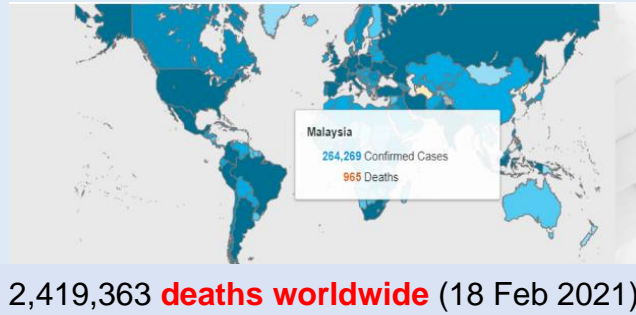
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## IDEA

To design a robot that can **lift mask** and **sanitize** by its own to reduce COVID-19 spreadness.

## WHO COVID-19 DASHBOARD



## ISSUE

Currently, millions of **contaminated face masks**, gloves and materials for **diagnosing, detecting and treating SARS-CoV-2**

## OBJECTIVES

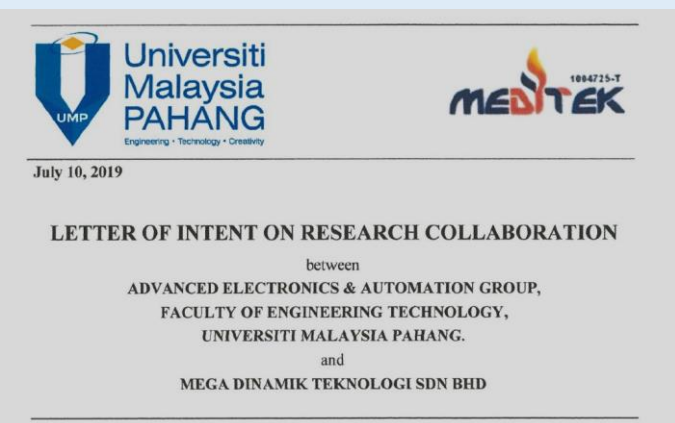
- To help authorities to **dispose mask** in effective way
- To **gather information** & insights
- To collect & **remove masks or other dangerous small items.**



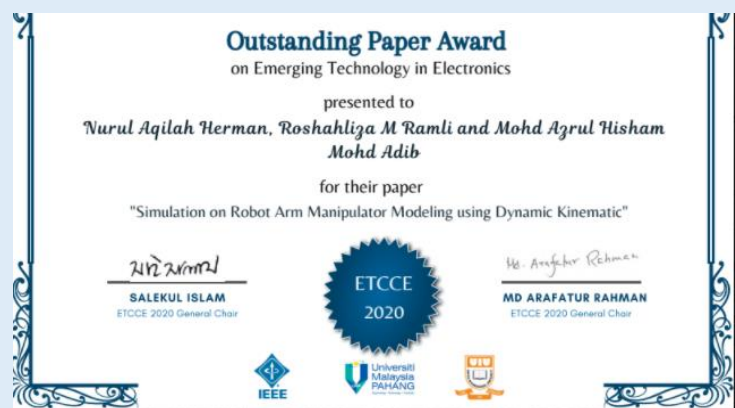
## NOVELTIES

- Reduce or **eliminate risk** to personnel's life
- Prevent spreadness of COVID-19** from contaminated mask
- Can be **operated in hazardous** conditions

## COLLABORATION



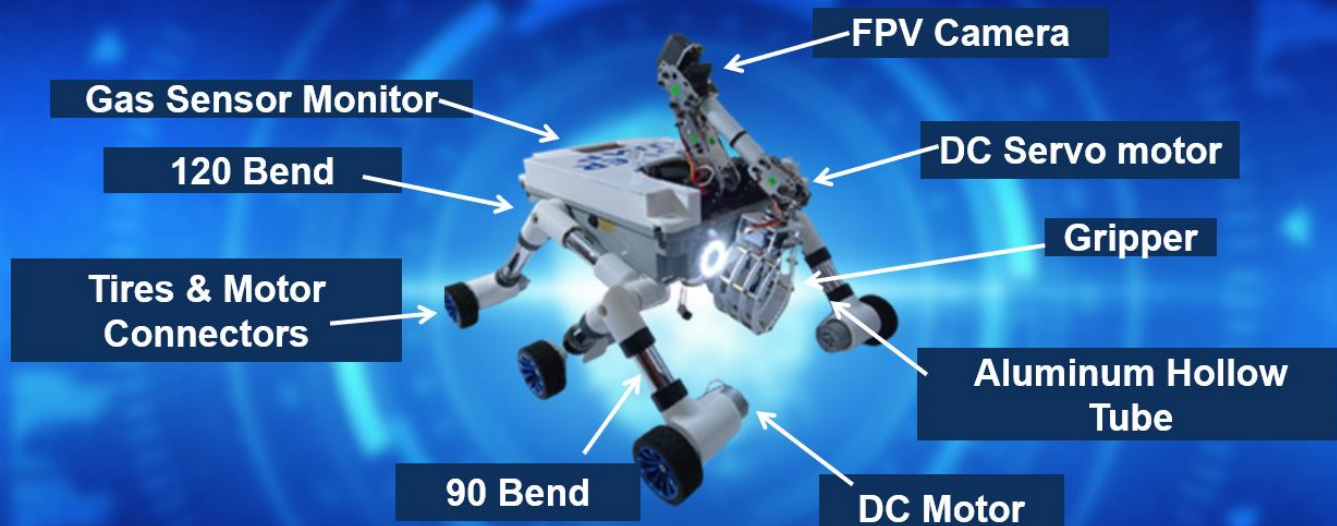
## AWARDS



## PUBLICATIONS

- Herman, N. A., Ramli, R. M., Adib, M. A. H. M., Widia, M. (2019, December). **Development of Robotic Rovers: A Review.** In *IOP Conference Series: Materials Science and Engineering* (Vol. 697, No. 1, p. 012034). IOP Publishing
- Herman, N. A., Sahat, I. M., Abdullah, W. A. J. S., Hisham, M., Adib, M., Ramli, R. M. (2020). **Smart Robotic Rover Enhancement in Safety Monitoring.** *International Journal of Emerging Trends in Engineering Research*, 8(1.2), p. 174-179.
- Ramli, R. M., Herman, N. A., Mazlan, M. R., Nazaruddin, A. S., Tuah, M. A., Abd Samad, A. N. E., Esmail, Y. M. (2020). **Development of Robotic Rover with Controller & Vision System.** *Indonesian Journal of Electrical Engineering and Computer Science*, 18(2), 766-773.
- N. A. Herman, R. M. Ramli, M.A.H.M Adib, **Simulation on Robot Arm Manipulator Modeling using Dynamic Kinematic**, Proceeding in 2020 Emerging Technology in Computing, Communication and Electronics (ETCCE), Dec 2020.

## PARTS OF UGV



## MARKETABILITY

