CONTRIBUTED TECHNOLOGIES DURING THE COVID-19 PANDEMIC: PERSPECTIVE OF ENGINEERS

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ABSTRACT

The novel coronavirus (Covid-19) pandemic has changed the world especially has led to dramatic loss of human life worldwide. This condition forcing medical practitioners, scientists and engineers to respond. Engineers across the world have been devising technologies during the Covid-19 pandemic. The contribution include designing the accurate temperature detection, assistive medical apparatus and designing a robot to limit the spread of the coronavirus. In this presentation a selected technologies by American Society of Mechanical Engineers (ASME) 2020 is presented. The ASME announced the 2020 emerging technology awards honor engineering innovations targeting Covid-19 are Ultraviolet Disinfectant Robot (UVD) robot to sterilize any surface autonomously, Advanced Kiosks for lobby system to check the fever, Active Ventilation Filter, Food Delivery Robot and 3D Printer for printed face shields. In addition, the keynote speaker also presented the two technologies used in Brunei Darussalam during the Covid-19 i.e. QR code scanning system to record human mobility in particular places and Smart Helmet based on infrared sensor for temperature mass detection. The keynote speaker also presented his contribution during the Covid-19 pandemic especially for Indonesia i.e. Disinfectant Chamber Product, Defender Full Mas combined with Powered Air-Purifying Respirator (PAPR) and Ultraviolet Robot for sterilization.

Keywords: Covid-19 pandemic, Engineers, Product Design, Robotics, Technologies