

## **Mensura Mask**

Mensura Mask, a research-driven initiative led by Dr Connor Myant and the Dyson School of Design Engineering, has recently been featured on CNN International 'Inventing Tomorrow' series (<https://youtu.be/3AgrBkwoiQ>). This new initiative is developing a cost-effective design-through manufacture process for customised face masks, in order to provide additional support to healthcare services during public health crises.

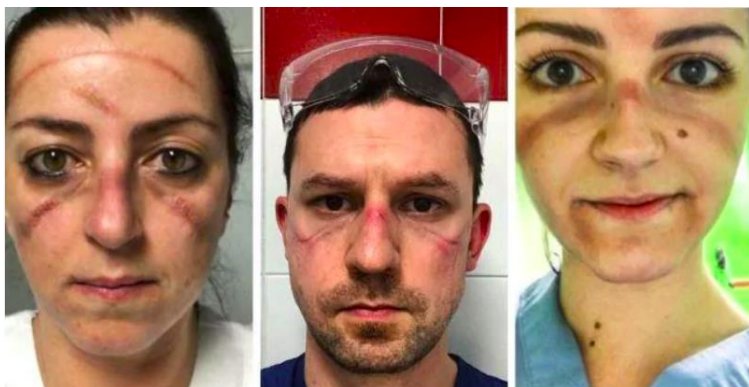
Face masks are an essential item of personal protective equipment for healthcare personnel during the COVID19 pandemic, and since its start the world has witnessed a global supply shortage of this vital product. Coupled to this, many users find the supplied masks cause significant bruising and even blistering as a result of poor fit and prolonged use. These injuries can deplete the available front-line work force, undermine morale and create further burdens to healthcare systems.

Custom fitted, reusable masks, offer a great solution but come with large price tags and take many hours to design and manufacture. To remove these barriers students from the Dyson School of Design Engineering have been developing an automated process which can design a bespoke face mask within minutes at little to no cost for healthcare providers. Their app utilizes 3D facial scans taken using an everyday smart phone to automatically design a custom-fitted face masks within minutes.

You can help! The project is seeking participants through their website [www.mensuramask.com](http://www.mensuramask.com). Anyone can join the initiative by uploading their facial scan, the process shouldn't take more than a few minutes. In return, you will receive a free CAD model of the Mensura Mask tailored to you. The Mensura Mask is 3D printable and reusable, and can be used during the current pandemic. By joining the study participants are helping the team to test and improve the automated system. This will enable the team to reach their goal of deploying a cost-effective method for creating custom-fitted respiratory masks for the NHS in times of public health crises.

Principal researcher, Shiya Li, explains 'the idea is to make customised face mask accessible to people who do not have the time nor the expertise to create their own. Anyone with a phone that has a depth sensor, or any 3D scanner can take their own facial scan, upload it to our website and receive a customised Mensura Mask. They can 3D print the mask using an at-home 3D printer or send it to a 3D printing service provider to make their own custom-fitted mask.'

The researchers hope that more people can join their study to help them improve their existing algorithm for making better fitted masks quicker. To find out more, you can go to their website: [www.mensuramask.com](http://www.mensuramask.com) or follow them on Instagram: [mensuramask](https://www.instagram.com/mensuramask).



Source: <https://time.com/5807918/health-care-workers-selfies-coronavirus-covid-19/>