3D Printed Wheelchair

INTERNET OF THINGS & DATA-CENTRIC DESIGN

ABOUT
3D printing a wheelchair with sensing capabilities.

CONTACT
Jacky Bourgeois
J.Bourgeois@tudelft.nl

FEASABILITY

3D printing is a critical tool as part of iterative design methods to rapidly evaluate and improve prototypes. Its use is expanding towards printing final, personalised products.

Meanwhile, recent advances in networked technologies (the Internet of Things) and data science methods have opened up unprecedented opportunities for modelling and analysing human behaviours.

In this project you will explore the combination of these two cutting edge technologies, merging digital and physical by 3D printing a wheelchair with sensing capabilities.

What is the role of 3D printing in blending digital and physical components of products?

PROJECT AIM
The aim of this graduation project is to model and 3D print a wheelchair. Through this process we will study the feasibility of embedding sensors in the printing process, moving a step further towards blending digital and physical components.

This project touches upon a range of subjects:

- 3D Printing
- Printed Sensors
- Digital Twins

INTERESTED?
This project is best suited for IPD students with interest in modelling, 3D printing and sensing capabilities.