

PORTFOLIO - 2021

A thick, horizontal red brushstroke underline with a slightly irregular, hand-painted appearance, extending across the width of the title text.

Utkarsh Singh

A small, horizontal red brushstroke underline, similar in style to the one above, positioned directly beneath the name.

Utkarsh Singh

I consider myself to be a designer for mobility. As a designer, I'm constantly trying to frame my own meaning of mobility. Mobility goes beyond the conventional meaning of transporting people from A to B. To me, it resonates with freedom, to move ahead with intent. This opens my world from designing prosthetics to payload for satellites.

I have a background in mechanical & manufacturing engineering, & want to combine these expertise to design products for the mass audience.

Education

B.Tech in Mechanical + M.tech in Advance Manufacturing
IIITDM Kancheepuram, Chennai India

M.Sc Integrated Product Design
Delft University of Technology, Netherlands





- SWAYAM

- An Academic project, now a startup
- Team : Started with 3, currently 8

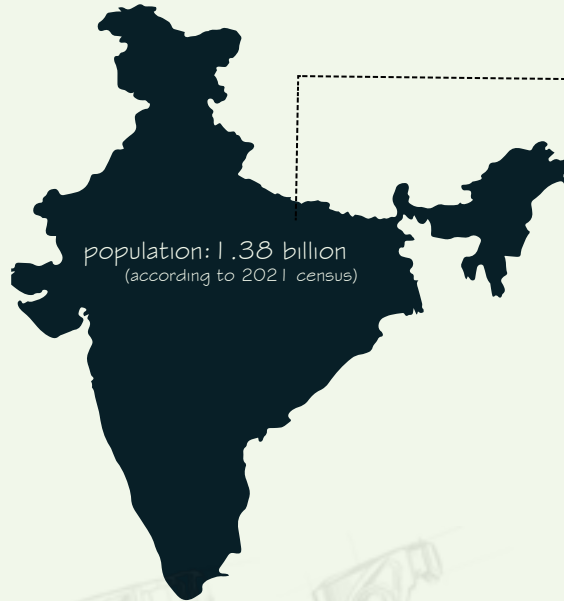
-Duration : 2018- current
- Current role : Consultant
User Research, Product Visualisation,
Video editing



Project Brief

While in the western market is filled with prostheses that assist active movement, these are quite expensive for the Indian market. The most affordable option available is known as Jaipur foot - a body powered prostheses made out of PVC.

Swayam is a wearable device designed for transfemoral (above knee) amputees . It provides torque assistance by mapping out the motion of the natural leg using an accelerometer. This data is transferred to the motor using bluetooth in real time.



Portfolio 2021 | Utakarsh Singh

41.4
million

3% of Indian population is physically challenged.

8.3
million

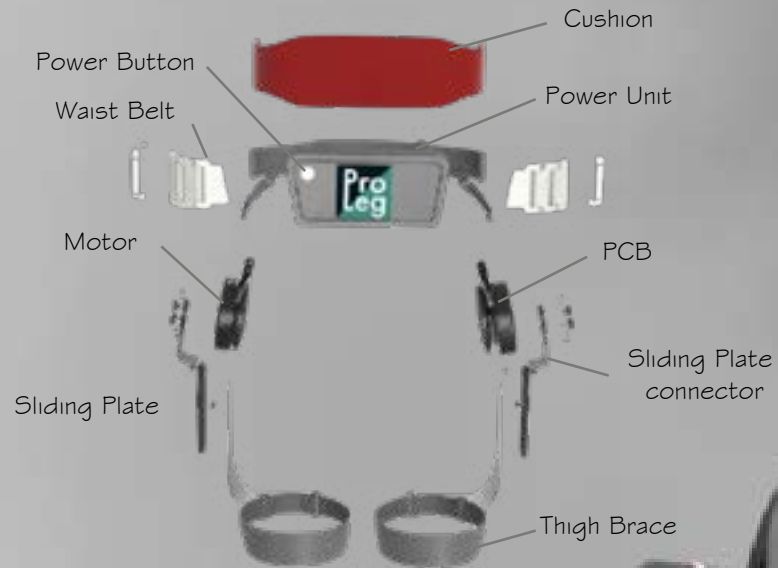
About 20% of these suffer from locomotor disability.

6.6
million

80 % of these use body powered prosthesis.

“Our vision is to improve the mobility of body powered prosthetic users, by designing innovative add-on solutions to existing products.”

Exploded View



Visual elements to communicate
battery & torque levels to user.

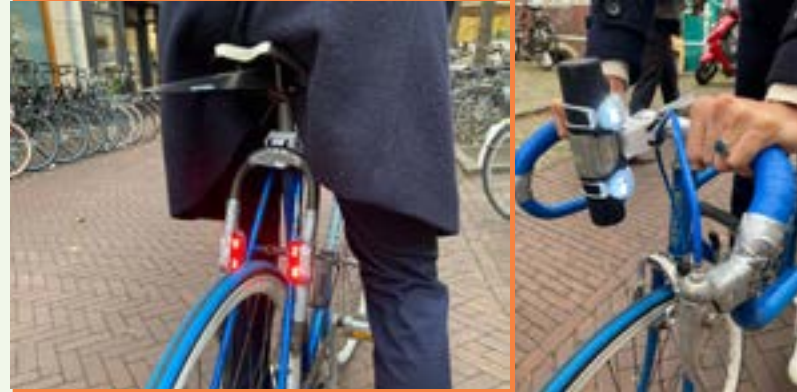
www.proleg.in



- KNIGHT LIGHT

- Academic project
- Team : 4

- Duration : October'21 - November'21
- Role : Consultant
Market Analysis, User Research,
Product Visualisation, Renders





KNIGHT LIGHT

For the ultimate night riders

