Abstract

This pandemic has taught us a lot on the importance of our physical posture, Almost all of us have suffered from bad posture felt fatigue on long commutes and weighed down by heavy backpacks. These physical issues are vexing, ever-present and cannot be solved by smartphone applications or digital gadgets.

We created the BioX as a bionic chair that allows you to rest anywhere you want with a posture that creates positive impact on your body. The way the BioX automatically adjusts your sitting posture is based on extensive research to create a natural resting position where the back remains upright while the thighs bend forward with the feet firmly planted on the ground to reduce the burden placed on the buttock. This position helps relax the muscles, encourage easy breathing and relieve pressure on the stomach.

The BioX weighs a little more than 1 kilogram so it can always be worn comfortably. Immediately feels relaxed as your back straighten and breathing becomes easier the moment you sit. The longer you use the BioX, the posture improvement will give you long-term physical benefits.

Design (ver 0.0.1) :

The model was prepared using Solidworks and went through FME analysis for the detailed information about the failure appropriate distribution of load ensuring stability and comfortability of our customers. The balancing of centre of mass and ensuring the Mobility was a challenge for us. After through research we came across appropriate materials to ensure mobility of BioX.

The BioX is made to be safe and the sitting angle is recoverable, this means unlike traditional 90-degree body and thigh sitting posture, you can easily stand up should you lose your balance.

We have also introduced a foldable Lock Mechanism so that it acquires minimum space. So now enjoy Comfort anywhere anytime with BioX. The BioX is your extra pair of legs whenever you want to sit and an extra set of shoulders whenever you have to commute. The only limit is where you want to go !!!