

Development of virtual Helmet Prototyping Design Software

Status: Available

Group Members:

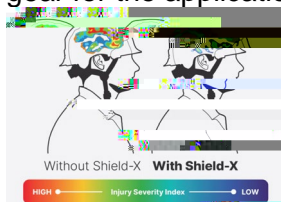
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Introduction :

Shield-X Technology Inc. wdesign regarding their protection against traumatic brain injuries and co Manufacturers (OEMs) and the end-users. The BrainShield

™ is a unique micro-engineered functional layer for helmets, which reduces the sharp twisting and compression of the brain during impacts – major contributing factors to concussions and other serious brain injuries. Shield-X currently has four products, BX-E, BX-I, BX-C, and BX-R, with more products in the pipeline. The Shield-X innovative head injury protective solutions have received significant media and public attention. It intends to become the leading technology developer for protective gear for the applications discussed.



Project Description:

Since there are numerous types and shapes of helmets, the product development time for different helmets has become laborious and time-consuming. As a result, the company is interested in virtual prototyping software utilizing Finite elements. The goal is to be able to scan a helmet and, from that, develop simulation software that can investigate the helmet performance under different impacts with and without the BX solutions. Results will be compared to experiments conducted at ShieldX.