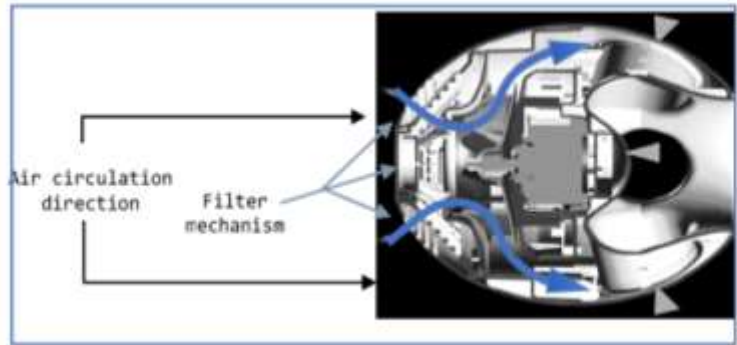


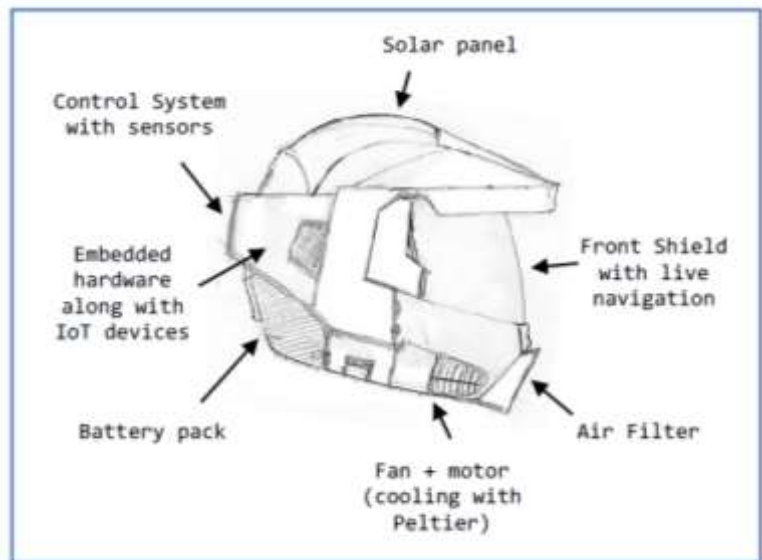
Format for the Project Submission

Project Id/No	AEL-02
Project Name	Prototyping Solar Powered Helmet
Project Members	Mentors – Dr. Swati Arora Mentee – Yatharth Aggarwal
Abstract	<p>The paper presents a unique design and prototype of a helmet capable of providing a comfortable and salubrious experience to the Delhi-NCR riders. The digitally controlled mechanism, while creating a pollution-free and breathable atmosphere, also provides live data of the environment in which the helmet is present. Solar panels provide continuous power to the system. The design uses the technology of thermoelectric cooling to provide cool air for the users through solar energy trapped by solar cells placed on the top of the helmet. A fan sucks the hot and polluted air from the outside, and pumps clean and cool air on to the face of the rider. The air first passes through the filters and then through the thermoelectric Peltier cooling unit. Further, temperature sensors are used to adjust the level of cooling or temperature inside the helmet. Also, an adjustable switch is provided, as an alternative to the user, through which he can control the temperature.</p>

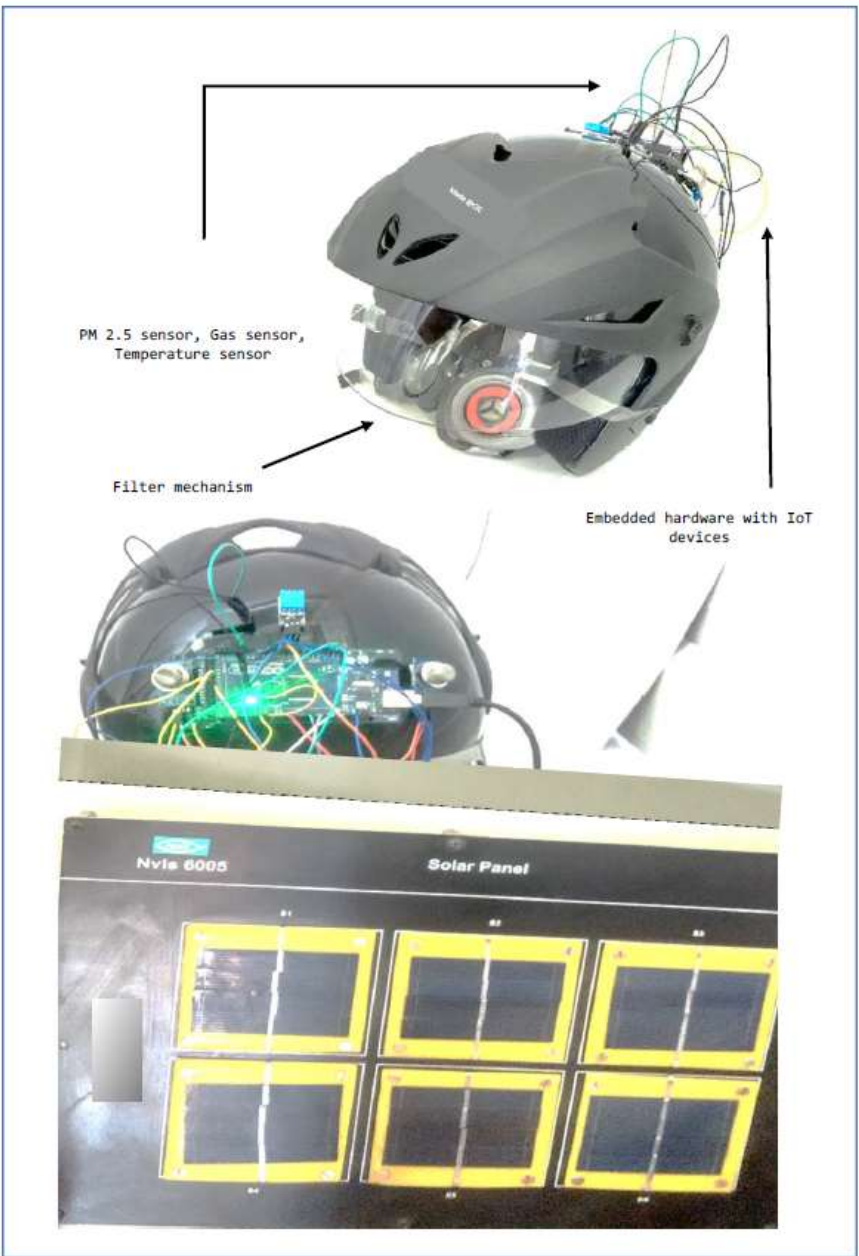
Project Photo



Air flow mechanism with filter placing



Proposed Design



Prototype images

Project Report

http://journals.du.ac.in/ugresearch/pdf-vol-3_1/J11.pdf