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## NATURAL HAZARDS AND DISASTER MANAGEMENT

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**An individualized disaster relief solution for dust-storm situations**Kiana Kalantar<sup>1</sup>, Rozita Farzam<sup>1</sup> and Shahin Javadi Nejjad<sup>2</sup><sup>1</sup>University of Tehran, Iran<sup>2</sup>Tehran University of Arts, Iran

Each year numerous cities around the world experience natural disaster permeated with fog like sand, also known as a dust storm. The dust storm was the meteorological phenomenon common in the arid and semi-arid regions. Particles will be transported by saltation and suspension, a process that moves soil from one place and deposits it in another. The Drylands around North Africa and the Arabian Peninsula are the main terrestrial sources of airborne dust. Dust storms have been shown to increase the spread of disease across the globe, like “keratoconjunctivitis” sicca (“dry eyes”) or lung cancer to name a few. People in these regions are in desperate need of a clean air, a better view and a safe protection. The aim of this research is to minimize the damages caused by this kind of disasters by designing a product, that would be usable in time of need and be able to prove people living in polluted cities or stuck during a dust storm with better and safer conditions. The methodology of this research is based on data analysis, survey, observation and brain storming creative ideas focused on the most important subjects. The original goal of the project was dedicated to fix the sight problem. By creating a list of the similar devices already in the market, we set out to refine and re-design them to create a unique and original form and function. Finally, “AirBubble” is designed by author as revolutionary product that works as a multi-purpose device focused solely on preventing any damage to people’s well-beings during a dust-storm disaster. AirBubble provides all the basic needs at the time of emergency for people to be able to resume their daily life and not be stopped by the unwanted and uncharted natural disasters such as dust storms and sand storms. This product is a positive step closer to the merge of technology and designed in order to create a customized environment for an otherwise unstable geological zone.

**Biography**

Kiana Kalantar is currently majoring in Industrial Design at University of Tehran. She is the Founder and Curator of TEDxUniversityofTehran, a member of the organizing team of Startup Weekend Arts and part of executive committee at TEDxTUA. She has been a selected member of the student society at her University. And also a member of Iran’s National Elites Foundation. She is the international Gensai Design Award Winner.

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