Arizona State University

Luminosity Overview

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LUMINOSITY

Our Vision

To establish a new model of **discovery and innovation** for the 21st century driven by a lean, **interdisciplinary** group of exceptional scholars who fuse **youthful spirit** with **intellectual prowess** and **business acumen**, and who strategically **leverage their position** within an academic institution to **take risks** and produce **radical innovations** capable of impacting **society**.

The Luminosity Lab

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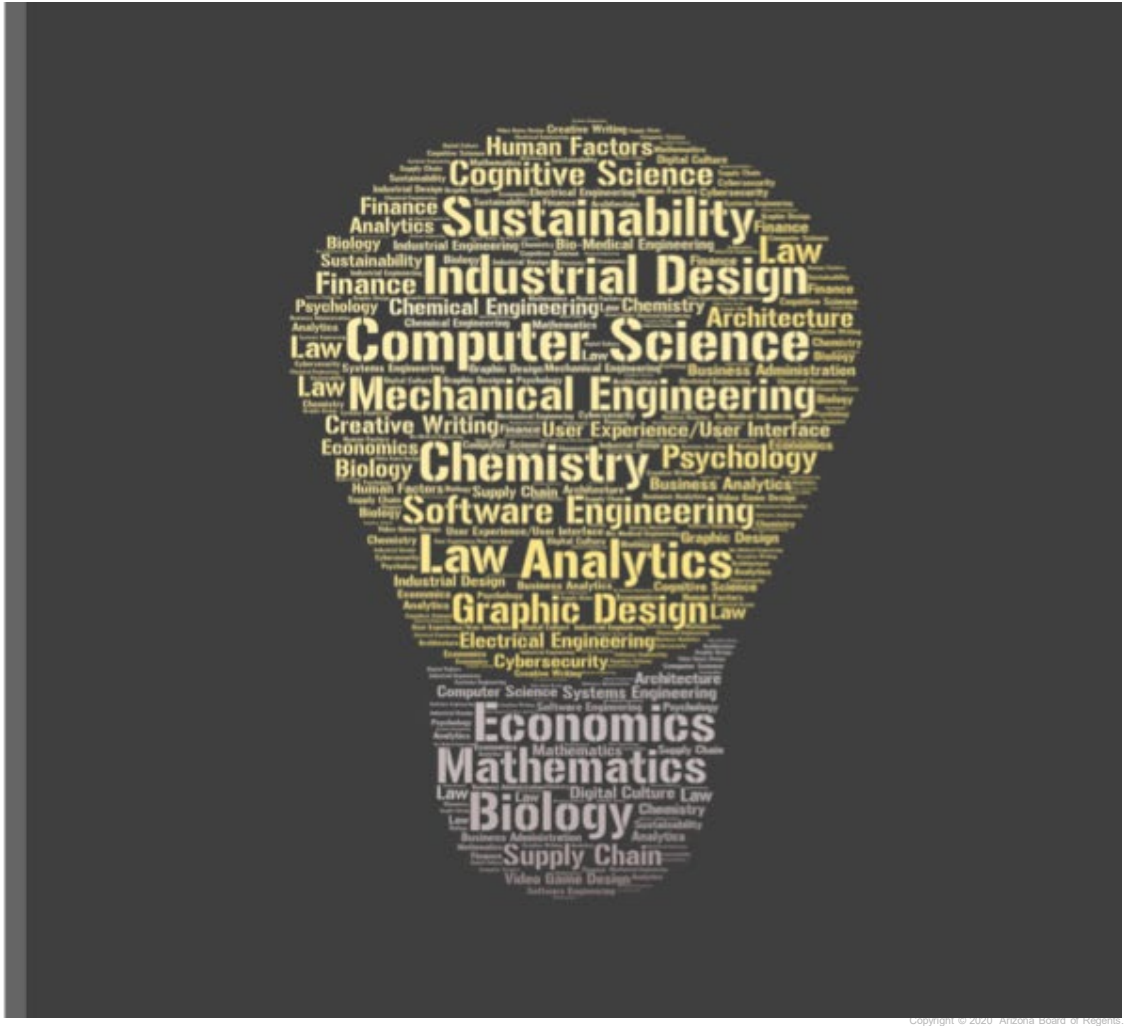

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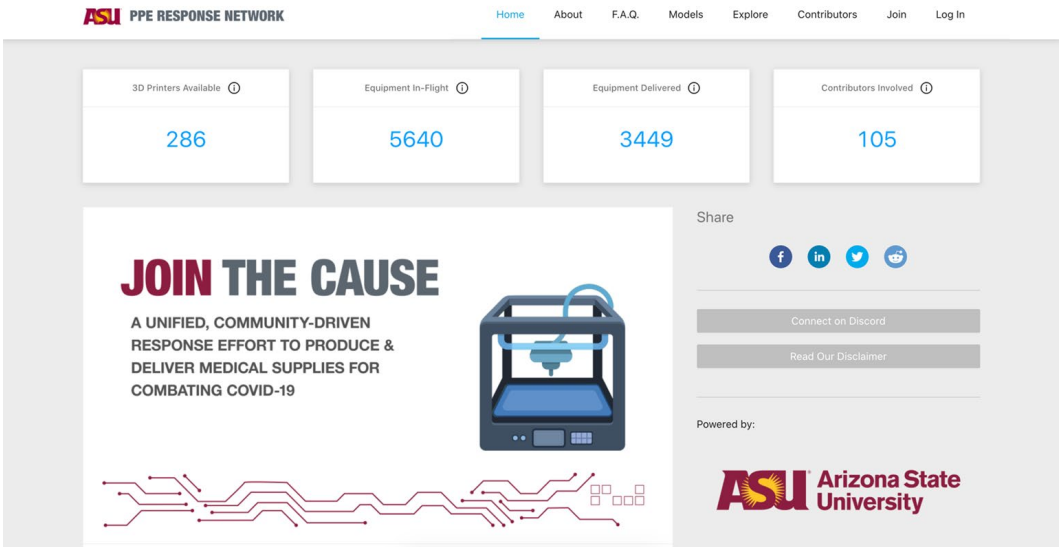
The PPE Response Network

Luminosity designed, built, and launched the PPE Response Network in less than 3 weeks.

To date, the network has produced and delivered over **10,000** pieces of PPE.



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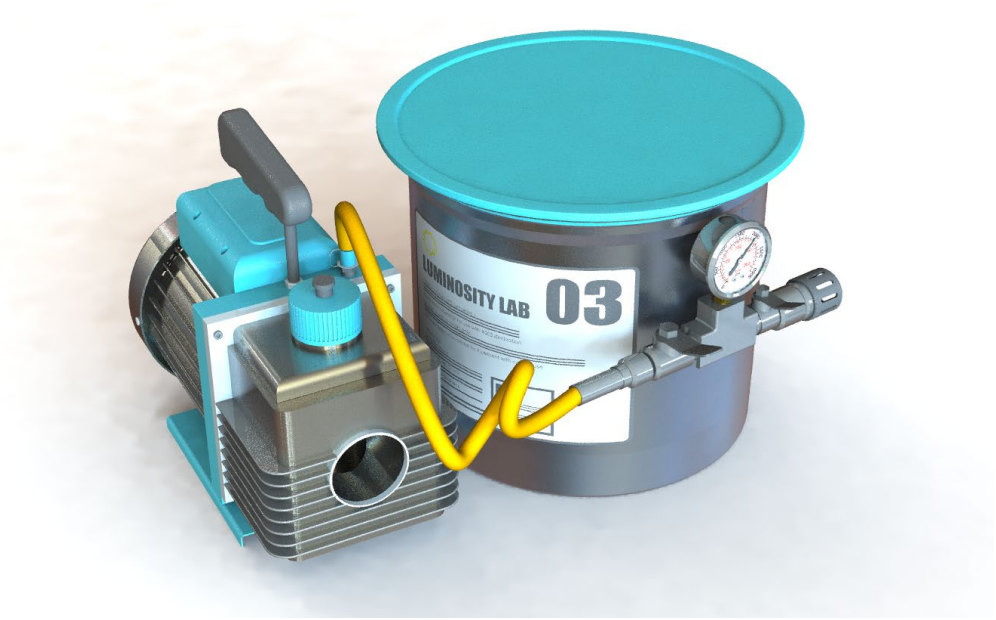
COVID-19 Sterilization Systems

Luminosity has designed, developed, and received provisional patents on two novel sterilization systems.

We are currently working with various partners to get these cost-effective systems into the hands of schools, medical providers, and small businesses.



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X-Prize Next Gen Mask

The Luminosity team is Top Five in the global X-Prize challenge reimagining face masks.

We have worked with 3M and Lydall to create the FloeMask, a comfortable and breathable mask with medical grade filtration efficiency.

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Forks for Families

Luminosity is partnering with the Food Supply Chain Coalition, United Food Bank, and Mesa Public Schools to provide a last mile solution for food delivery to families in need.

Piloting with 70 families from Mesa's Roosevelt Elementary School.

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Combating Hate Based Violence

Luminosity is competing in the McCain Institute's Peer2Peer Protective Competition.

For this project, we are designed an online platform for schools to use to better engage their students using their interests.

MCCAIN INSTITUTE

ARIZONA STATE UNIVERSITY

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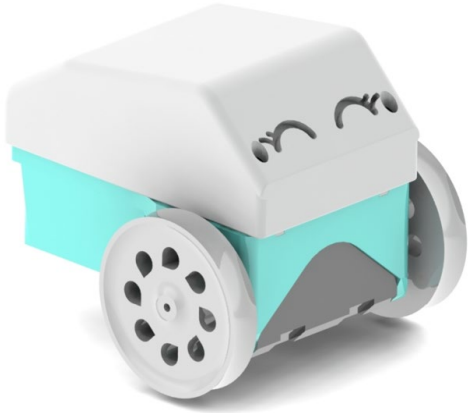
Kip: Robotics Collaboration

Luminosity has developed a robotics platform in collaboration with Hewlett Packard Enterprise to serve the Girl Scout's efforts to engage women in STEM.



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Trident One: Autonomous Vehicle

Luminosity acquired a Chevrolet Camaro and converted it to a fully autonomous vehicle in less than 6 months.

Trident One is currently ASU's only road ready test vehicle for autonomous vehicle data collection, research, and development.

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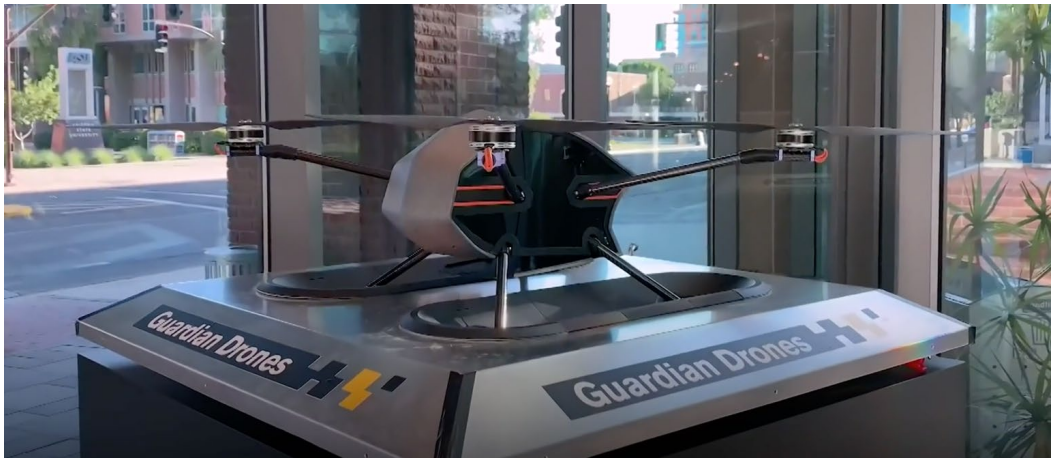
Guardian Drones

Luminosity re-engineered the Guardian Drone, greatly improving its form factor, functionality, and efficiency.

The Guardian Drone system also received a provision patent and has began to receive commercial interest.



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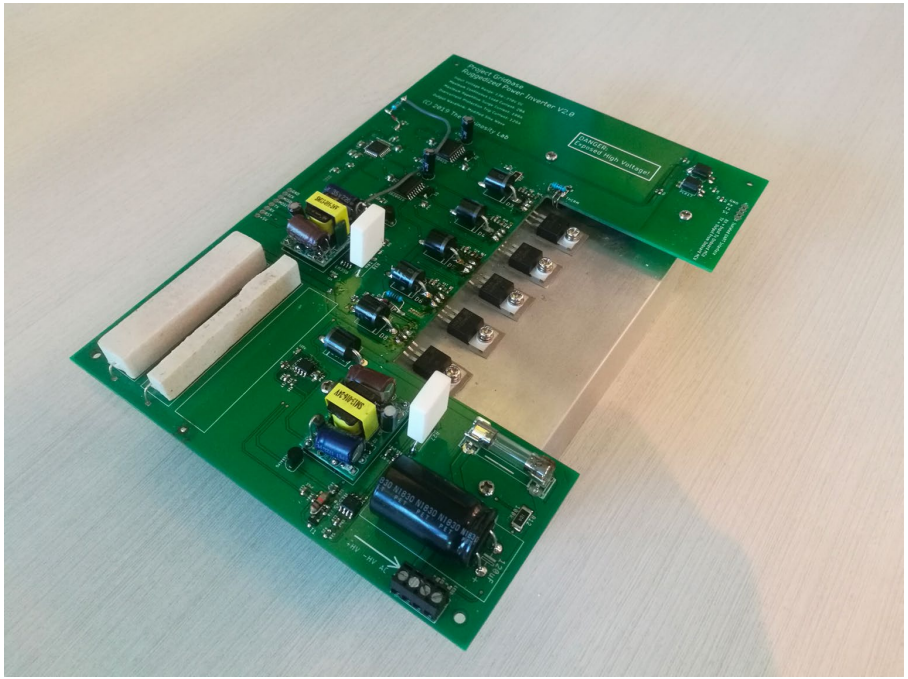
Gridbase Energy System

Luminosity developed a D.C. micro-grid solution that is low cost, easy to assemble on-site, and can produce power with high efficiency and reliability.

The system is designed to interoperate with existing infrastructure and loads and will distribute equitable allocations throughout the network during times of electrical scarcity.



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NASA BIG Idea Challenge

Luminosity was selected by NASA as one of eight teams to develop a system to explore the moon's darkest regions.

Luminosity is building a spring based launcher capable of deploying probes that can collect and send data directly to the lander for several hours.

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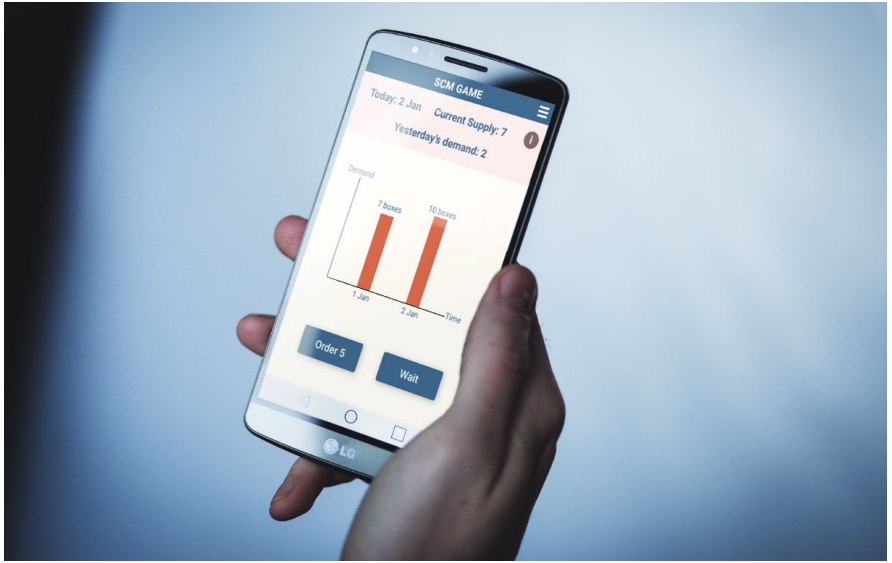
Shipshape

Luminosity was funded as part of a USAID grant to build and launch a mobile game that teaches supply chain concepts to health workers in Ghana.

Luminosity sent a team to Ghana twice to test the app and found that it was statistically significant in achieving a lift in learning outcomes.



USAID

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Bank of the West: Innovation Lab @ Skysong

Luminosity has launched a custom innovation lab at Skysong to service Bank of the West's business challenges.

BANK OF THE WEST
BNP PARIBAS

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Lane College Architecture Project

Luminosity provided design and architectural support to Lane College, a Historically Black College, to inform a commercial development project that they are building in an Opportunity Zone for their students.

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Ghana Lab

Luminosity Lab has partnered with KNUST in Kumasi, Ghana to build out an innovation Lab on their campus.

ASU and KNUST students will collaborate to solve problems affecting each others communities.

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Please contact us at luminosity@asu.edu

Thank You!

Arizona State University

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