

Use Case Name: Increase campus safety with blockchain blue light system

Use case sponsors: Mycelium Networks and the Blockchain Center of Excellence at the University of Arkansas

Challenge statement:

In the late 1980's, many colleges and universities across the United States sought to enhance campus safety in the wake of a nation-wide rise in campus crime rates. By 2008, more than 90% of higher education institutions had installed blue light safety systems. In years since, some institutions have called into question whether these devices are still as effective and efficient as they were intended to be at the point of installation.

Presently installed blue light safety systems are flawed from both a monetary and campus security standpoint. These systems are costly, with installation price tags reaching as high as \$20,000 per device and yearly maintenance costs of about \$1,000 per device, making them a less than cost effective security measure. Blue light systems have been the subject of scrutiny in recent years due to their lack of frequent use due to the popularity of cell phones and decline in validity of calls.

With campus crime continuing to be a problem at institutions across the country and a lack of innovation in campus safety in recent decades, it is clear that innovation in the space is necessary. We ask hackathon participants to rethink what a campus safety system can be.

The Target Audience/Customer Group:

The customer group for a replacement to the existing blue light system is not limited to colleges and universities. A more effective security solution has use and value within a suite of different public and private organizations focused on security, such as bike trails, parks, malls, and more.

Design and Features of the Blockchain-based Solution:

- The device must utilize the Helium Network for data transmission.
- The device must be simple enough to be operated by people of all ages and language backgrounds.
- The device should utilize a solar panel and battery to power its LoRaWan components.
- The device should be outfitted with high visibility components such that it could be identified outdoors easily in any conditions.
- Packet transmission time should be less than 5 seconds.
- The device may include additional security features such as sirens, flashing lights etc.

Intellectual Property Policy: Students own the Intellectual Property (IP) created from the hackathon use cases.

Use Case Contacts:

Liam La Fargue
Director of Growth - Mycelium Networks
liam@myceliumnetworks.com

Sam Winstead
Resident Builder - Mycelium Networks
sam@myceliumnetworks.com

Nick Carpinito
Blockchain Analyst - Mycelium Networks
nick@myceliumnetworks.com