



The Center for Public Safety Initiatives (CPSI) at RIT announce the 2018 STEAM Prize winners. Prizes will be awarded Saturday at the IMAGINE RIT Innovation + Creativity Festival at 2:00 PM at the GORDON FIELD HOUSE.

GOLD PRIZE - \$5,000

Clockwyse

Tyler Krupicka Ketan Reddy, and Jeremiah Zucker (all from the Computer Engineering program)

Mass notification systems allow higher education institutions to warn staff and students of emergencies on campus. The current approach relies heavily on SMS/Email, which has limitations as a primary contact method. Many people do not receive alerts in time, and the message length is too short to allow full location information and instructions. The best available solutions are emergency “beacons” mounted around campus, but the current products are expensive and inflexible. We have designed a system of beacons which use inexpensive tablets to distribute alerts, while providing a vastly improved feature set. Our hope is that this project can directly improve the safety of higher education institutions everywhere.

SILVER PRIZE - \$2500

Burglary Pattern Prediction

Italo Sayan (Business Administration-Finance), Nathan Raw (Management Information Systems)

This project applies mathematical algorithms to the prediction of burglary by focusing on patterns emerging following initial burglary events. The work is based on applications of the methodology in other fields including prediction of earthquake aftershocks. In criminology, these algorithms are known as Self Exciting Point Processes (SEPP) models. Using these models, it is possible to leverage previous events and literature to implement a tool for crime analysis in police departments.

HONORABLE MENTION

Emergency Communication Design: Addressing The Gaps & Looking Ahead

Dave Villarreal, Aishwarya Uniyal (both MFA students in Industrial Design)

We propose for the augmentation of existing paradigms around public safety by focusing on two modes of communication in the event of an emergency. One addresses the accessibility issues around the blue light emergency phones while the other integrates a more comprehensive wayfinding/navigation system that is adaptable to rapidly changing emergency situations. The proposed systems are designed to integrate with established technologies to help mitigate cost and to also keep the multiple channels of communication present.