COVID-19 Safety Technologies

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Putting IoT Technologies into Action

As most know, the IoT Conduit at 12-22 North has been shut down since March due to the Vermont Executive Order following the Coronavirus pandemic. Since then, we have been diligently thinking of new solutions. Given the IoT Conduit is a testbed for Smart City technologies, we acted in the way we know best – test new tech using pilot prototypes.

Below are examples of Internet-of-Things technologies being developed by VT entrepreneurs who want to make all Vermonters safer as our economy reopens. These are a few of the innovative concepts being tested in our all-in-one COVID-19 safety kiosk. The technology will include sensors, thermal cameras, automated guest check-in, disinfecting supplies, and more to ensure any building has the best possible safety features at their fingertips. We are actively seeking market feedback to better our product.

[Tim Guiterman of InfiSense presents a wireless Smart Room sensor](#)

InfiSense has installed a network of wireless Smart Room Sensors at 12-22North and explains how their LoRa data backhaul works to make integrations easy and hassle free with existing Information Technology. These sensors show real-time room and building occupancy numbers to tenants before they decide to go to the office using their on-line portal. These sensors coupled with Raspberry PI-driven displays will also show temperature and relative humidity in all offices and public spaces for proving ASHRE smart building recommendations.

[StreamLogic uses calibrated camera images to feed AI algorithms](#)
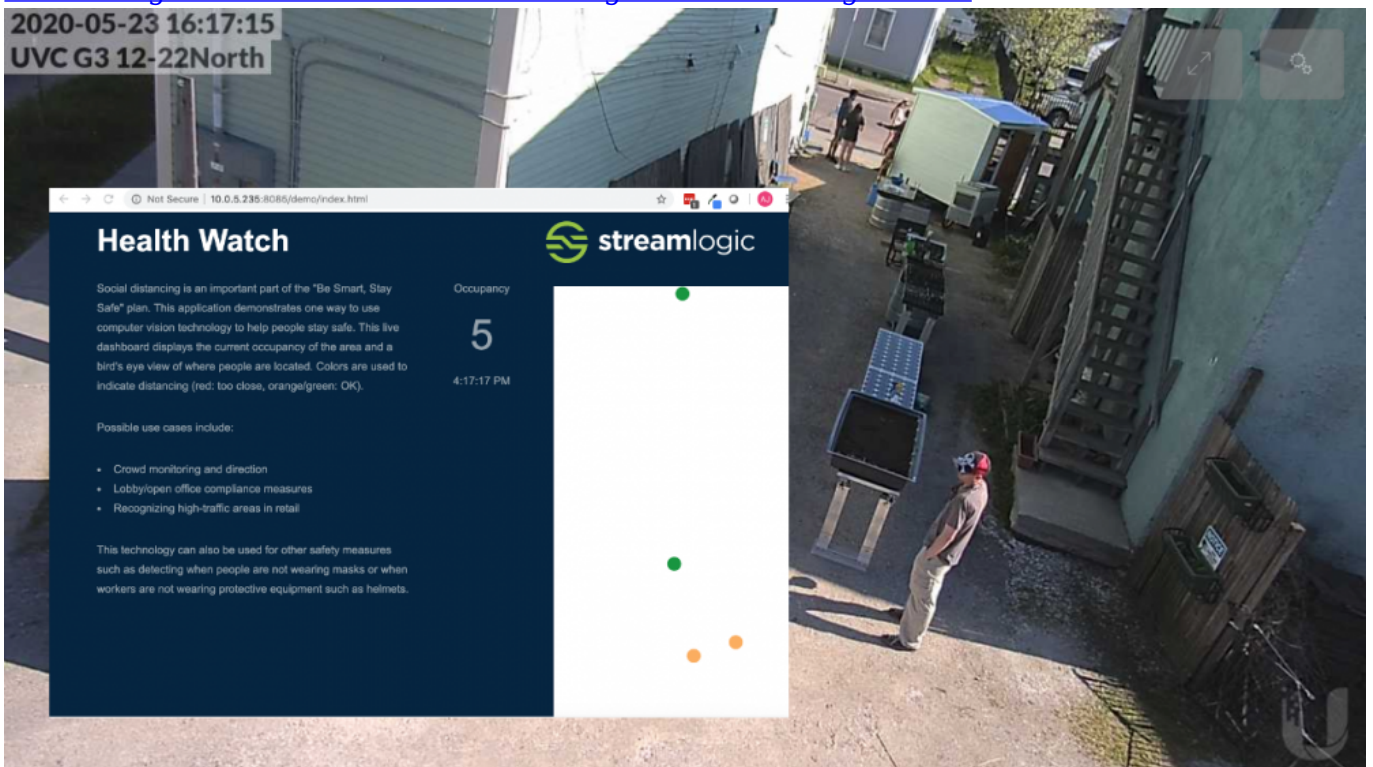
HealthWatch is an early-stage application to help educate the public about social distancing – in real time. Using Camera AI, HealthWatch displays a top-down, bird's eye view of the monitored space showing people's locations (as dots) color coded to show if they are meeting 6′ distancing recommendations. Statistics are collected anonymously and stored locally or in the cloud. The collected data could be used as a measure of success in meeting social distancing goals or even help better achieve goals by identifying locations or times when violations are highest.

[Prince Awhaite experiments with hydroponic setups and local wellness concept](#)

Last, but not least, Healthy Kingdom is all about beating the Coronavirus though wellness. Prince thinks it is time to get on the offensive by tapping the power of proper nutrition. Healthy Kingdom will be adding high-quality, low-cost food options + testing hydroponic technology to add to his coconut-based smoothies that boost your immune system. Prince dreams of a mobile vending stand that uses Amazon Go-like technology for convenience and the prevention of virus transmission in hotspots.

Safety Kiosk Early Protoype