**Stratio puts shortwave infrared (SWIR) technology into the palm of your hand**

STRATIO, INC. is one of 10 startups from around the world working with the Luminate NY accelerator at NextCorps in downtown Rochester. These companies are helping to write the next chapter in Rochester’s history as the world’s center for optics, photonics and imaging (OPI).

Each company in Luminate’s cohort 5 received an initial investment of $100,000 and participates in the six-month program, which helps the selected companies speed the commercialization of their technologies and businesses. On October 19, at Finals 2022 at the Rochester Riverside Convention Center, they will compete for up to $2 million in follow-on investment. Funding for the $25 million program is provided through Empire State Development’s Finger Lakes Forward Upstate Revitalization Initiative.

“Within the Luminate program, we have a first-hand look at some of the most exciting imaging technologies our industry has seen,” said Dr. Sujatha Ramanujan, managing director of Luminate. “Stratio is doing their part to democratize powerful technology, creating an alternative to cost-prohibitive sensors used in many industries.”

We caught up with James Lee, Stratio’s Co-founder and CEO, to discuss how the company is creating specialized tools using infrared imaging.

**TELL US ABOUT YOUR COMPANY.**

Stratio, Inc. provides infrared imaging solutions leveraging the world’s first Germanium (Ge)-based Shortwave Infrared (SWIR) sensor. Our proprietary methods allow us to produce SWIR sensors to capture images that our eyes cannot see, doing it at far lower cost than traditional SWIR sensors.

Our patented sensor technology enables portable and affordable devices to collect data and our AI platform translates the data into meaningful insights that can be used in innovative applications, including Autonomous and Driver Assistance Systems (ADAS), robotic surgery and precision agriculture.

**WHERE IS YOUR COMPANY HEADQUARTERED?**

Stratio is based in San Jose in Silicon Valley, California.

**WHO ARE THE COMPANY FOUNDERS?**

Stratio was founded in 2013 by three Stanford University electronic engineering PhD students. Our aim is to democratize SWIR technology.

How did you and your team develop the concept for your product?

As PhD students in Electrical Engineering, we knew about the many advantages of infrared imaging — from material analysis to night vision. However, the technology is prohibitively expensive so that only a few could benefit from it. We started searching for an alternative and realized the potential of a new sensor material, Germa-
nium (Ge), to be responsive to infrared light waves in real life. We consulted with experts and conducted countless experiments to find out how we could achieve low cost, small size and low power consumption. A year later, in January 2013, the idea became a business: Stratio.

WHY DOES THE WORLD NEED THIS PRODUCT?
Infrared imaging technology has long been too expensive, complicated and bulky for the general public to benefit from it. Use was primarily limited to large laboratories and the defense sector. Our product changes that, allowing for a device that is both considerably smaller and more cost-efficient.

HOW LONG HAVE YOU BEEN WORKING ON THIS TECHNOLOGY?
We created Stratio in 2013 and have been working together since then to perfect our technology and build a novel infrared image sensor and camera.

WHO IS THE TARGET AUDIENCE FOR YOUR PRODUCT?
We are currently collaborating with companies around the world that need infrared sensing technology. We are gradually expanding the scale of these collaborations to include global companies, research institutes and government agencies that work with quality inspection and material analysis.

WHAT MADE YOU LOOK TO ROCHESTER TO FURTHER YOUR PRODUCT?
Rochester, which is considered the “City of Optics,” offers a network of experts in optics industries and provides unique opportunities to collaborate with iconic companies and renowned universities.

TELL US ABOUT YOUR EXPERIENCE BEING IN LUMINATE.
The Luminate program has provided us with ample opportunities to network with like-minded startups in the cohort and to make new connections within the optics industry for potential collaborations. These important network connections will help us to further advance our product and expand our reach.

WHAT ARE YOU HOPING TO ACHIEVE DURING YOUR TIME IN LUMINATE?
Through the Luminate program we’ve been able to raise funding for new research and development initiatives, which have expedited mass production processes. We’ve also built quality relationships that are helping us to build aggressive sales and marketing capabilities and campaigns. We would like to continue building on these efforts and also ensure further feasibility of our solution by running a pilot program with major corporations to meet advanced criteria.

IF YOUR COMPANY WINS, WHAT DO YOU PLAN TO DO WITH THE FOLLOW-ON FUNDING?
If we win Luminate’s Finals 2022, we plan to use the follow-on funding to further advance our manufacturing capabilities and push sales and product development of our new device, BeyonSense. We also plan to build a Post Processing lab in Rochester.