

## Luminate Spotlight: SCOUT ushers in a new era of space safety

SCOUT 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 is participating in the six-month program, which helps speed the commercialization of their technologies and businesses. On October 19, at Finals 2022 at the Rochester Riverside Convention Center, the companies will compete for up to \$2 million in follow-on investment. Funding for the \$25 million program is being provided through Empire State Development's Finger Lakes Forward Upstate Revitalization Initiative.

"Each Luminate cohort is pushing the boundaries for how OPI technologies are applied to create world-changing products and services," said Dr. Sujatha Ramanujan, managing director of Luminate. "SCOUT is leveraging optics technology to address safety issues in space, essentially giving spacecraft the eyes to better navigate and avoid threats beyond the earth's atmosphere. Its work at

the Luminate accelerator will help them speed this much needed technology to protect space operations."

We caught up with Eric Ingram, Co-founder and CEO of SCOUT, to discuss how the company is helping to improve the safety of the rapidly evolving space industry.



Ingram

### Tell us about your company.

SCOUT is an acronym: Our SCOUT-Vision systems help SpaceCraft Observe and Understand Things around them. As a spaceflight hardware, software, and data provider, we are developing solutions to improve the safety and vision of U.S. assets in space.



We offer dual-use, autonomous imaging solutions for rendezvous and proximity operations, satellite servicing, space traffic management, and orbital debris detection. By providing on-orbit distributed space sensing, we greatly improve Space Domain Awareness and ensure responsible use of the space environment.

### Where is your company headquartered?

We are headquartered in Alexandria, Virginia.

### Who are the company founders?

SCOUT was co-founded by me, Eric Ingram, and Sergio Gallucci. I previously served as an aerospace engineer for the Licensing and Evaluation Division of the FAA's Office of Commercial Space Transportation and have extensive experience in commercial spaceflight regulatory issues. Sergio is a multidisciplinary engineer who has built space programs from scratch and taken them to orbit for startups, academia, and the U.S. government.

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

We identified a growing demand to help make space a safer and more sustainable environment.

To meet that demand, we are developing sensors and systems to make spacecraft more aware of their surroundings, and providing services related to space traffic management to better track and monitor assets in space.

**Why does the world need this product?**

The space industry has been growing at an unprecedented rate over the last decade. It's getting increasingly congested and contested, and it's estimated that space traffic will likely grow 40x over the next decade. That growth rate increases the probability of conjunctions and collisions and can possibly exacerbate current issues of space debris and junk in orbit.

Traditional ground-based systems are limited and can't keep up with the density and complexity of the growing space population. While many satellites may have eyes on Earth, they don't have knowledge about what's going on around them in space.

SCOUT is changing space operations by providing vision-based autonomy solutions for Earth and space. Our tools enable systems to better identify and avoid risks and failures, and help satellite operators be more productive and efficient.

Our tech stack for satellites spans data fusion software, proximity operation algorithms, pose estimation, docking assistance, star-tracking, and attitude determination. By combining our Autonomy Software with SCOUT-Vision payload systems, space operators have a bundle of sensors and machine learning enabled software at their fingertips.

**How long have you been working on this technology?**

We have been working on SCOUT technology since 2019.

**Who is the target audience for your product?**

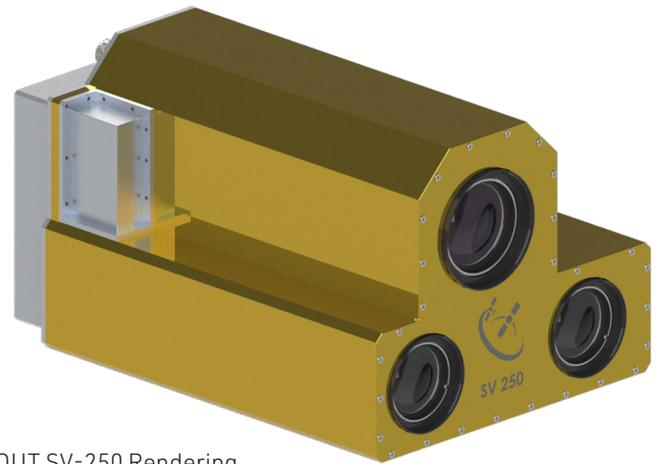
Our solutions are created for spacecraft operators.

**What made you look to Rochester to further your product?**

Rochester is one of the richest places in the world for optical systems experience and talent. Given that SCOUT's products rely on vision capabilities, Rochester and its network are an ideal fit for us, providing access to valuable relationships and partnership opportunities.

**Tell us about your experience being in Luminate.**

Since day one of our Luminate experience, it's been



SCOUT SV-250 Rendering  
(Image provided)

evident that every member of the Luminate staff cares about the cohort companies and the Rochester community. Multiple members of our team have attended their events and our work has benefited from their experiences.

**What are you hoping to achieve during your time in Luminate?**

Our hope is to come out of the Luminate accelerator with a stronger understanding of how we can serve the expanding space market and grow our business more effectively. In addition, we believe the network we've been building with the cohort members and constituents in the Rochester optical community will carry forward and evolve into stronger friendships, and, ideally, partnerships where possible.

**If your company wins, what do you plan to do with the follow-on funding?**

If we win, the funding will allow us to expand our engineering and product teams to meet the rapidly increasing government and commercial interest in our offerings, while confidently executing on our sales pipeline.