

Spinout Founding Team – Autonomous Space Robotics

Search Open: February - March 2024, or until filled

Trailblazers are already building the road to space. It's time to design, build, test, and launch the space habitat and robotic infrastructure for a life worth living once we get there. Aurelia Institute is a non-profit space architecture research and development lab, education and outreach center, and policy hub dedicated to scaling humanity's presence in space. We are seeking a founding CEO and CTO for an aerospace company that will be incubated internally and spun-out in 2024.

We are developing self-assembling robotics for microgravity environments (e.g., autonomous docking of satellites, parabolic mirror tiles, habitat components, etc.). We are building this company around the TESSERAE platform concept (flight proven prototype, flown twice to ISS) first in a beachhead market and ultimately, if applicable, in a range of use cases.

The founding team will work closely with the technology inventor/PI and the board to develop a business model, go-to-market plan, and technology roadmap and will lead the next in-space demo. This role includes existing engineering team support, a straightforward path to in-house capital for the first pre-seed round (pending performance), and extensive mentorship and entrepreneurship support through the Aurelia ecosystem to empower the founding team as the steady-state leaders of the company going forward. Both individual applicants and founding partner teams are welcome to apply.

Background on Aurelia Ecosystem

- <u>Aurelia Institute</u> is a non-profit space architecture R&D lab, education and outreach center, and
 policy hub dedicated to building humanity's future in space, with cross-over technologies for
 climate change mitigation on Earth. This new organization was spun out of Dr. Ariel Ekblaw's
 research lab at the <u>MIT Space Exploration Initiative</u>.
- Aurelia Foundry is a for-profit deep tech space fund investing in companies that spin out of Aurelia's non-profit incubation ecosystem and in outside founders that fit our investment thesis for life in space and space infrastructure for the benefit of life on Earth.
- Together, the two pieces form a hybrid organization whose mission is to prepare humanity to become a thriving, Earth-conscious, spacefaring species. Our aim is to develop the infrastructure, technologies, markets, and policies that will help us scale humanity's horizons from early space stations in LEO to the fullness of a principled interplanetary civilization. We are at a critical inflection point in the space industry where major commercial investments are being made and precedents are being set at a record pace. Aurelia is moving quickly to drive and shape rigorous, accessible space exploration with strategies for long term human flourishing, while profoundly benefitting life on Earth.



CEO expectations & requirements:

- Undergraduate B.S. in technical field (science/engineering)
- Advanced degree (MBA preferred, or technical MS + business experience)
- 7-10 years working experience in technical or business management of complex engineering development AFTER undergrad (can include grad programs)
- Excels in developing and leading product roadmap for highly technical, high risk work
- Effective operator with proven track record of executing on complex, multi-stakeholder projects
- Strong background in business fundamentals (creative strategy & business model drafting; financial/accounting literacy; ability to generate and grow revenue; interdisciplinary ease across HR, ops, logistics)
- Exceptional communicator; facility with pitching, public speaking, and digital thought leadership; experience with board communication and facilitation
- Experienced with strategic partnerships and brings a unique, influential network to the role
- Thoughtful, accomplished leader with intentional vision for balancing healthy & hustling team culture
- Prepared to lead an early stage start-up through multiple rounds of fundraising & high growth period (explicit prior experience or aptitude for this is critical)
- Compelling, charismatic individual who can recruit others to the mission; high EI/EQ
- Demonstrated passion for space exploration / aerospace field

CTO expectations & requirements:

- Undergraduate B.S. in technical field (science/engineering)
- Advanced degree (PhD or technical MS + work experience in relevant field)
- 7-10 years technical experience in development of complex engineering systems in aerospace & defense AFTER undergrad (can include grad programs)
- Excels in developing and leading technical roadmap for highly specialized, groundbreaking work
- Interdisciplinary, strong technical background in at least one of the following:
 - Mechatronics / embedded systems / applied EE
 - Aerospace controls / ADCS / GNC (or drone experience)
 - Aerospace structures / advanced mechanisms / MechE
 - o Coding for hardware (firmware, BLE, etc.)
 - o *in the early days, the CTO is expected to be an individual technical contributor as well*
- Must be highly familiar with / able to supervise a technical team through:
 - Engineering CAD (solidworks or fusion preferred; CATIA welcome)
 - PCB design (Altium, Eagle, and/or comparable)
 - Aerospace simulation and software tools (Matlab/Simulink, ANSYS/STK, NX, etc.)
 - Requirements drafting & systems engineering best practices
- Strong communicator, with high EI/EQ and passion for leading top-notch technical teams



- Multifaceted thinker with ability to pull in expertise from multiple fields and manage complex, multi-subsystem projects
- Prepared to lead an early stage start-up through multiple rounds of fundraising and high risk,
 in-space technical deployments
- Demonstrated passion for space exploration / aerospace field

Additional preferred skills (for both CEO and CTO):

- Prior early stage start-up experience, in a team of 5-50 employees
- Prior founder experience
- Explicit Aerospace Industry work experience
- Experience fundraising >\$50k
- Experience with DoD ecosystem / government contracts
- Have flown something to space previously

Major Perk:

• Recurring annual zero-gravity flights where you (personally) get to fly :)

How to Apply:

Fill out <u>our application form</u> and include your resume/CV. Cover letters or email self-introductions are not required but may be helpful for those transitioning from another industry.