

Senior Aircraft Design & Aerodynamics Engineer

ABOUT MightyFly

At MightyFly, we are pioneering a revolution in the logistics industry via our autonomous hybrid eVTOL cargo aircraft. Our mission is to provide efficient, affordable and low emissions expedited deliveries to everyone.

Legacy logistics services are time and resource intensive. At MightyFly, you will have the opportunity to work on cutting edge technology to change that. We are building autonomous eVTOL aircraft with cargo capacity of 100 to 500 pounds and range of 600 miles. Our expedited delivery services aim to streamline B2B and B2G logistics, providing very efficient point-to-point deliveries to our customers. We will fundamentally transform how goods are moved around the globe.

Join the MightyFly team and help us change the world!

ABOUT THE ROLE

MightyFly is seeking a highly motivated and technically skilled Senior Aircraft Design & Aerodynamics Engineer to join our team. This role will play a crucial part in the overall design and aerodynamic analysis of our vehicles from early-stage ideation through flight test.

The ideal candidate will have a deep understanding of both multirotor and fixed-wing aerodynamics, as well as aircraft performance, vehicle sizing, and design optimization. You should be comfortable in a fast-paced, highly collaborative environment – collaborating with other aerodynamicists and disciplines (airframe, manufacturing, electronics, software, GNC, etc.), from high-level design studies to hands-on prototyping and flight test data analysis.

WHAT YOU'LL DO

- Contribute to conceptual and preliminary design efforts, including configuration studies and performance optimization with a focus on OML shaping.
- Analyze aircraft aerodynamic characteristics using tools of appropriate fidelity (e.g., AVL, XFOIL, XROTOR, CHARM, Fluent, STAR-CCM+).
- Collaborate with the airframe, manufacturing, electronics, software, and controls teams to ensure aerodynamic considerations are integrated throughout the design process.



- Develop aerodynamic databases and performance models for use in design trade studies,
 GNC simulations, and mission planning tools.
- Process and interpret flight test data to validate predictions and improve design maturation.
- Rapidly iterate and prototype aerodynamic surfaces and configurations, using both computational and hands-on methods.
- Participate in multidisciplinary reviews and contribute to airplane-level design decisions.

WHAT YOU'LL BRING

Technical

- Bachelor's degree in Aeronautical/Aerospace Engineering or Physics
- o 5+ years of experience in aerodynamic analysis and aircraft design
- Understanding of multirotor and fixed-wing aerodynamics, vehicle sizing, and aircraft performance.
- Proficiency with aerodynamic simulation tools such as AVL, XFOIL, XROTOR, CHARM, ANSYS Fluent, STAR-CCM+, etc.
- Proficiency with a Computer Aided Design package CATIA, 3DX, SolidWorks, etc.
- Experience with MATLAB and Python for analysis and automation.
- Demonstrated ability to work across disciplines in a collaborative, fast-paced environment.

Planning & Partnering

- Ability to plan and deliver on time
- Technical communication skills
- Organizational Skills

General

- A passion for building systems from the ground as a team
- Be a self-starter with the ability to work and thrive in a dynamic and fast-paced environment
- Appetit for innovation
- A can-do attitude for learning new things and applying them to solve complex problems.

Desired

- Experience with general aviation, large UAVs, or VTOL aircraft
- Familiarity with aviation certification standards & processes
- Familiarity with aeroelastic analysis
- Familiarity with integration of propulsion systems
- Familiarity with electric and/or hybrid-electric propulsion architectures

WHAT ELSE YOU NEED TO KNOW

MightyFly is only able to sponsor TN visas and H1B visa transfers for this position at the present time.



Equal opportunity:

MightyFly is an equal opportunity employer and prohibits discrimination and harassment of any type. We do not discriminate based upon race, religion, color, national origin, sex (including pregnancy, childbirth, reproductive health decisions, or related medical conditions), sexual orientation, gender identity, gender expression, age, status as a protected veteran, status as an individual with a disability, genetic information, political views or activity, or other applicable legally protected characteristics.

Diversity:

MightyFly values diversity and welcomes applications from those who are traditionally underrepresented in the tech industry. We are an international team, led by a female CEO.

Job Location:

- Bay Area.
- Work will be on site.

Culture:

- We are aviation and aerospace enthusiasts who believe the sky is not the limit.
- **Teamwork:** We believe that to achieve great results we need great teamwork.
- **Working hard:** Building reliable aviation and logistics products is really hard but also exciting, challenging, and rewarding.
- **Having fun:** We believe that hard work needs to be coupled with fun. We love hanging out beyond the workday, hosting team dinners, and organizing fun activities. We love the outdoors and outdoor sports. And of course, we love flying.
- Celebrating wins large and small.
- **Creativity.** We love and encourage creativity. The best ideas emerge when our working environment fosters out-of-the-box thinking.
- Equity, inclusivity, and respect for the diversity of life and work experiences that each individual brings to the team.
- Transparency, honesty, and integrity.

Benefits:

- Competitive health, dental, and vision insurance
- 401k Plan
- Commuter benefits
- Complementary in office meals and snacks
- Paid time off
- Stock option/equity plan

APPLY

Email a copy of your resume and a brief introduction about yourself to jobs@mightyfly.com.

