

Airframe Assembly Intern

Intern: Kevin Ruiz Hernandez

Mentors: Travis Welch, Tedd Michel, Tristan Kyle-Hammer,

Jordan Lowe, Alek Parolari

Opportunity: Joby Aviation



An Electric Vertical Take-Off and Landing aircraft is the future of aerospace and transportation. Joby's goal is to help put EVTOL's in the sky by 2025 to help reduce our emissions by offering a ridesharing experience similar to Uber.

This summer I had the great opportunity of working alongside a great team of engineers to help this become a possibility. With the help and mentorship of these amazing engineers, I was able to design tools that help with the manufacturing and assembly of the aircraft itself, by improving and helping ease the technicians' already very difficult task of assembling an aircraft that is going to carry passengers in it. I managed this by working alongside the technicians and engineers by designing and 3D-printing various prototypes of a tool and going back to the technicians and engineers for feedback until we came up with the final design that the techs were comfortable using.

One of my biggest accomplishments during this internship was working alongside one of my Mentors, Travis Welch to help design a fixture that would make bonding the Wing Tip fairing a lot easier than what it was for the technicians. During this process I had to learn what would work and what would not with graphic design, as well as coming up with a solution to make sure physical moving parts will all move in synchronization to ensure that the surfaces being bonded are all bonded evenly. Once the fixture was complete and put to use, the wing tip fairing assemblies had drastically improved not only in quality aesthetically but also structurally.

Kevin Ruiz

Major: Engineering

