Yagho Franco Grossi Mota

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April 7, 2025

Skydio Hiring Team Skydio · 3000 Clearview Way · San Mateo, CA 94402

Dear Skydio Hiring Team,

I am writing to apply for the Junior Embedded Systems Engineer position at Skydio. As a second-year Electrical Engineering student at the University of Michigan with a minor in Mathematics and a concentration in robotics, I am deeply inspired by Skydio's mission to make the world more productive, creative, and safe through autonomous flight. Your commitment to cutting-edge technology and responsible innovation resonates strongly with my technical experiences and long-term aspirations.

My foundation in embedded systems was built through projects like engineering a line-following robot using a Raspberry Pi Pico. I implemented real-time motor control using embedded C, programmed infrared sensor arrays, and optimized power management with a LiPo battery. This hands-on experience taught me how to integrate hardware and software at a low level—skills directly applicable to Skydio's advanced autonomous platforms. Additionally, during my time at ATI LTDA in Brazil, I explored embedded development using the ESP32, transitioning from ESP-IDF to Nuttx, and building IoT prototypes that allowed wireless microcontroller control via mobile devices.

My involvement in the University of Michigan Solar Car Team's Microsystems division gave me further insight into rigorous system design. I independently redesigned a thermal test oven using a PID controller and LCD interface to simulate battery pack conditions, directly applying control theory to real hardware. This taught me the value of precision and repeatability—both critical to safety and reliability in autonomous systems. I continue developing these principles as a member of the Autonomous Robotic Vehicles (ARV) and Michigan Autonomous Aerial Vehicles (MAAV) teams.

Driven by a passion for aerial robotics, I maintain an open-source drone project focused on modular flight control and sensor fusion, where I explore architectures for scalable autonomy. These efforts reflect not only my initiative and collaborative spirit but also my alignment with Skydio's vision of reliable, intelligent robotics. Thank you for considering my application. I would be excited to contribute my skills to your team and help push the boundaries of autonomous flight. I am available at yaghofgm@umich.edu or 734-389-3937.

Sincerely,

Yagho Franco Grossi Mota