



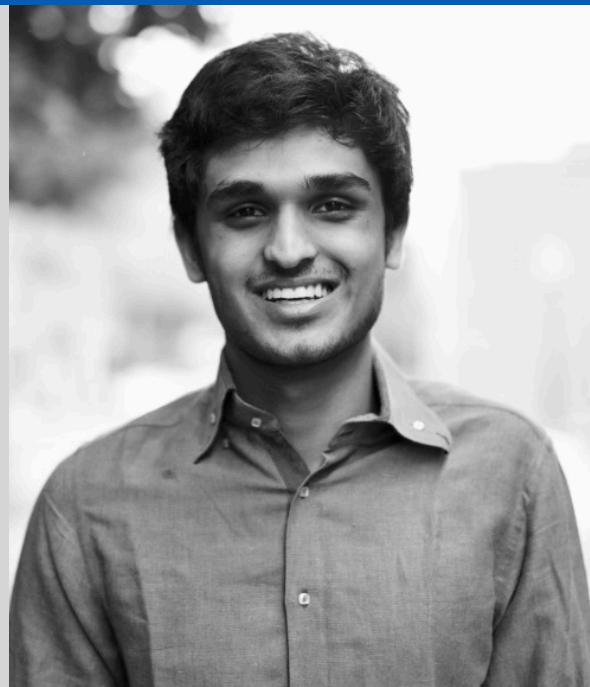
UNIVERSITÀ
DI PARMA

DIPARTIMENTO DI INGEGNERIA
E ARCHITETTURA

BEYOND THE DEMO: ENSURING ROBOTIC RELIABILITY IN SAFETY CRITICAL ENVIRONMENTS

DIVYANSHU PACHISIA

Divyanshu is an autonomy engineer on the planning and controls team at [Skydio](#), where over the past 3 years he has played a key role in building automated dock landings, teleoperation for infrastructure inspection, and autonomous subject tracking. His previous industry experience spans a wide variety of robotics applications - manufacturing at [Trackonomy Systems](#), 3D printers at [Carbon](#), and surgical robots at [Neuralink](#). Divyanshu holds a Master of Engineering (MEng) and a Bachelor of Science in Engineering (BSE) from Princeton University's Mechanical and Aerospace Engineering Department. During his MEng, he worked on the development of a [task-relevant out of distribution detector](#) and for his undergraduate thesis he [applied soft eversion robots for drip irrigation](#). His interests lie in generalization for robotics, motion planning, and the applications of robotics.



Drones have evolved from toys, to tools, to now serving as critical infrastructure in industries like first response and inspection. Positioned on rooftops in automated docks for immediate deployment, their reliability is crucial. Skydio has conducted well over 2 million customer flights, is set to do 1 million this year alone, and has become an indispensable part of everyday operations.

This talk leverages Skydio's experience to discuss what it takes to deploy autonomous drones at scale in safety critical settings, such as emergency response. Using the example of the fully autonomous dock landing subsystem essential for remote operations, this talk will highlight practical principles and necessary trade-offs essential for reliable performance in these demanding and safety-critical environments.

THE TALK WILL TAKE PLACE ON MICROSOFT TEAMS
WEDNESDAY, JULY 9TH 2025, FROM 17:30 TO 18:00 CEST

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