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Paper Title : Enhanced Quadrotor Trajectory Tracking Using an Integral Sliding Mode Controller in Wind Disturbed Environments

Bio :

Noman Bashir earned Bachelors Degree in Mechatronics Engineering from the National University of Sciences and Technology (NUST), Pakistan, and began his career on clean-energy initiatives at the Sustainable Development Policy Institute's Clean Energy Unit. He is now an M.Sc. candidate in Systems & Control Engineering at King Fahd University of Petroleum & Minerals (KFUPM) and a Research and Teaching Assistant in the Control and Instrumentation Engineering Department.

His current work develops and implements autonomous navigation and planning for homogeneous and heterogeneous UAV swarms, emphasizing real-time perception, sensor fusion, and robust trajectory tracking. Beyond aerial robotics, his research explores renewable-energy control and optimization, including EV-charger power electronics, MPPT strategies for PV−fuel-cell hybrids, and wind-speed forecasting. His interests span autonomous aerial systems and sustainable energy.