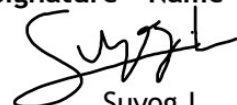SRN: PES1PG22CS052

This text discusses the design and operation of VTOL (Vertical Take-Off and Landing) aircraft, particularly in an urban setting with collision avoidance in a non-deterministic environment. The author emphasizes the importance of cutting-edge technology, software, and hardware solutions in constructing and operating such aircraft. Several factors are identified as crucial, including sensing and perception, navigation and planning, collision avoidance, safety and redundancy, and communication and control. The author suggests that creating a well-posed machine learning problem with performance, task, and experience parameters is one way to construct a VTOL system. Finally, the text highlights the advantages and future enhancements of VTOL technology, as well as its potential uses in various fields.

According to the text, several technical and regulatory issues need to be resolved before VTOL aircraft can be extensively deployed. Despite this, the author notes the potential uses of VTOL technology in search and rescue operations, emergency medical services, freight and passenger transportation, military activities, and urban air taxis.

Signature - Name - Date

Suyog.L
05/04/23