[**Autonomous Drone Path Planning Using Deep Learning**](http://localhost:8888/tree/data%20valley%20projects/Autonomous%20Drone%20Path%20Planning%20Using%20Deep%C2%A0Learning)

**Abstract**

Path planning is a crucial aspect of autonomous navigation, particularly in environments with multiple obstacles. This study evaluates the *Sequential\_9* model, designed to ensure both efficiency and safety in navigation. In a scenario with five obstacles, the model achieved a total path length of 75.18 units, closely matching the straight-line distance of 75.12 units, resulting in a path efficiency of 99.92%. Additionally, it maintained a minimum distance of 9.16 units from obstacles, demonstrating robust collision avoidance capabilities. These results highlight the *Sequential\_9* model’s effectiveness in generating precise, safe, and near-optimal paths, making it suitable for complex environments.

**Keywords:** path planning, autonomous navigation, collision avoidance, Sequential\_9 model, path efficiency, safety margin.