

1 Bird recognition in the city of Paris

1. **Problem Statement**

The Paris City Council has decided to implement a bird recognition system in the city. This will help to identify different species of birds and their locations. The system will also provide information about the number of birds present in each area.

2. **Objectives**

The main objective of this project is to develop a bird recognition system that can identify different species of birds in the city. The system should be able to recognize birds from various angles and locations.

3. **Methodology**

The methodology used for this project is the following:

- 1. Data collection: Collect data from various sources such as bird surveys, citizen science projects, and environmental monitoring systems.
- 2. Feature extraction: Extract features from the collected data, such as bird species, location, and time of day.
- 3. Model training: Train a machine learning model using the extracted features and labeled data.
- 4. Model evaluation: Evaluate the performance of the trained model using various metrics such as accuracy, precision, and recall.
- 5. Model deployment: Deploy the trained model to a cloud-based platform for real-time bird recognition.

4. **Structures and data**

5. **Training and testing**

6. **Deployment**

7. **Monitoring and maintenance**

8. **Future work**

9. **Conclusion**

10. **References**

11. **Appendix**

12. **Annexes**

13. **Annex 1**

14. **Annex 2**

15. **Annex 3**