# Ressources intéressantes

Partie software :

Projet déjà réalisé par Google : <https://coral.ai/projects/bird-feeder/?utm_source=pocket_reader#project-intro>

Projet Open Source : <https://trendingthoughts.com/2021/12/07/building-a-bird-species-detector-using-opencv-and-yolo-v4-darknet-application/?utm_source=pocket_reader>

Photothèque LPO : [LPO Île-de-France (lpo-idf.fr)](https://www.lpo-idf.fr/?pg=ph) (environ 70 images par espèce)

Microsoft’s Common Objects in Context : [COCO - Common Objects in Context (cocodataset.org)](https://cocodataset.org/#home) (around 3 000 pictures of birds)

Coral Smart Bird feeder : [GitHub - google-coral/project-birdfeeder](https://github.com/google-coral/project-birdfeeder)

TensorFlow (traitement données Machine Learning) : [TensorFlow](https://www.tensorflow.org/?hl=fr)

CNN from Kaggle : [🦜Bird Classification using CNN + EfficientNetB0 | Kaggle](https://www.kaggle.com/code/vencerlanz09/bird-classification-using-cnn-efficientnetb0)

Kaggle data set of 525 bird species : [BIRDS 525 SPECIES- IMAGE CLASSIFICATION (kaggle.com)](https://www.kaggle.com/datasets/gpiosenka/100-bird-species)

[Bird Detector Based on Microsoft Azure and Raspberry Pi - Hackster.io](https://www.hackster.io/JiongShi/bird-detector-based-on-microsoft-azure-and-raspberry-pi-d43d1d)

Partie matériel :

Nichoirs proposés par la LPO : [Nos modèles de nichoirs oiseaux | Boutique LPO | Boutique LPO](https://boutique.lpo.fr/categorie/jardin-d-oiseaux/nichoirs)

Prévoir des panneaux solaires miniatures : [Solar Power Bank 20000mAh Portable Charge PowerBank Convenient Travel External Auxiliary Battery for iPhone MI - AliExpress](https://www.aliexpress.us/item/3256805847615550.html?spm=a2g0o.productlist.main.23.2e2e67adI4Zw7J&algo_pvid=be8a866e-8795-4477-84d8-bde91899e1ca&aem_p4p_detail=202309180821539835676170496330000897514&algo_exp_id=be8a866e-8795-4477-84d8-bde91899e1ca-11&pdp_npi=4%40dis%21EUR%2126.94%2115.62%21%21%21204.38%21%21%40211b88f116950505136882879efcf0%2112000035416601567%21sea%21US%210%21ABS&curPageLogUid=Wke7tHSVTJ5N&search_p4p_id=202309180821539835676170496330000897514_12) or [Solar Power Bank 30000Aah Portable Charger Outdoor Waterproof with LED External Battery Pack for Android iphone Powerbank - AliExpress](https://www.aliexpress.us/item/3256805847617621.html?spm=a2g0o.productlist.main.115.2e2e67adI4Zw7J&algo_pvid=be8a866e-8795-4477-84d8-bde91899e1ca&aem_p4p_detail=202309180821539835676170496330000897514&algo_exp_id=be8a866e-8795-4477-84d8-bde91899e1ca-57&pdp_npi=4%40dis%21EUR%2127.96%2116.22%21%21%21212.17%21%21%40211b88f116950505136882879efcf0%2112000035416674260%21sea%21US%210%21ABS&curPageLogUid=BB2A6qo49paU&search_p4p_id=202309180821539835676170496330000897514_58) or [100% original waterproof solar power charging bank, emergency charger, external battery, top-notch, 200000mAh - AliExpress](https://www.aliexpress.us/item/3256805574765610.html?spm=a2g0o.productlist.main.35.2e2e67adI4Zw7J&algo_pvid=be8a866e-8795-4477-84d8-bde91899e1ca&aem_p4p_detail=202309180821539835676170496330000897514&algo_exp_id=be8a866e-8795-4477-84d8-bde91899e1ca-17&pdp_npi=4%40dis%21EUR%2128.43%2113.65%21%21%21215.71%21%21%40211b88f116950505136882879efcf0%2112000034258684232%21sea%21US%210%21ABS&curPageLogUid=oxx6mHzTW8Q9&search_p4p_id=202309180821539835676170496330000897514_18)

Faisabilité :

[Deep learning‐based methods for individual recognition in small birds - Ferreira - 2020 - Methods in Ecology and Evolution - Wiley Online Library](https://besjournals.onlinelibrary.wiley.com/doi/10.1111/2041-210X.13436)