

Module 2: Portfolio Milestone

Brady Chin

Colorado State University Global

CSC506-1: Design and Analysis of Algorithms

Dr. Dong Nguyen

January 26th, 2025

Portfolio Milestone

For this portfolio project, I will develop a program that uses computer vision to enhance waste management by accurately identifying recyclable materials. Using the TrashNet dataset (Ziouzios, D., et. al, 2020, August), the model will be trained to classify static images of waste into categories like paper, plastic, metal, and glass. The goal of this project is to create an efficient solution that streamlines the recycling process and reduces errors, contributing to a more sustainable approach to waste management.

References

Ziouzios, D., et. al, (2020, August) *A Distributed Architecture for Smart Recycling Using Machine Learning*. ResearchGate.

[https://www.researchgate.net/publication/](https://www.researchgate.net/publication/343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9fQ)

[343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning](https://www.researchgate.net/publication/343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9fQ)

[?](https://www.researchgate.net/publication/343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9fQ)

[_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9f](https://www.researchgate.net/publication/343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9fQ)

[Q](https://www.researchgate.net/publication/343841421_A_Distributed_Architecture_for_Smart_Recycling_Using_Machine_Learning?tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Ii9kaXJlY3QiLCJwYWdlIjoX2RpcmVjdCJ9fQ)