# Project 5 Pollution Vision

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## Abstract

# Introduction

## Literature review

There are many studies using digital camera and advanced algorithm to estimate the concentrations of Particulate Matters. Hong et al. [1] developed a novel method of predicting the concentrations and diameters of outdoor ultrafine particles using street-level images and audio data in Montreal, Canada. Convolutional neural networks, multivariable linear regression and genralized additive models were used to make the predictions.

# Model

## Shiyuan’s model

My model setup splits into two part, the first is image data extraction, the second is the selection of appropriate model to fit this dataset.

### Image Extraction

### Model selection

## Gemma’s model

## Weiqi’s model

# Xueao’s model

## Conclusion

## References

1. **Predicting outdoor ultrafine particle number concentrations, particle size, and noise using street-level images and audio data**
Kris Y. Hong, Pedro O. Pinheiro, Scott Weichenthal
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