

Code Instructions and Key Contributions

Source Code:

Source code for the entire application along with notebooks (.ipynb files) for image processing techniques and neural nets is available at this repository:

<https://github.com/gandalf1819/Denoise-docs-CV>

Key Contributions and Task Breakdown:

- Kartikeya Shukla (ks5173): Median Filter, Canny Edge Detection (Dilation & Erosion), Adaptive thresholding
- Chinmay Wyawahare (cnw282): Autoencoders (CNN), Linear Regression, AWS Deployment/Integration
- Michael Lally (mfl340): Model Validation & Evaluation, Software Engineering (Flask App), Latex report

Directory structure on GitHub:

```
|-- dataset
    |-- test.zip → test image dataset
    |-- train.zip → training image dataset containing noisy dataset
    |-- train_cleaned.zip → cleaned images for respective noisy images in train.zip
|-- frontend
    |-- static → CSS, JS for flask web app
    |-- templates → HTML pages for flask web app
|-- reports → collection of reports submitted on this project
|-- results → resultant images for each technique
    |-- adaptive-results
    |-- autoencoder-results
    |-- edge-detection-results
    |-- median-results
    |-- regression-results
|-- screens → screenshot/snippets for each tab/page on webapp
```