

Data Science Laboratory 1

Lab 7 Practical Challenges

- Create a 512×512 2D array (an image) containing Gaussian noise with some μ and σ . Add this noise to an existing image and output the results. Calculate the number of pixels that exceed values of 3σ . Confirm that this is consistent with what would be expected using the probability distribution function. Write out a greyscale PNG image where $> 3\sigma$ ‘detections’ are set to 1 and 0 elsewhere.

Remember: use GitHub to maintain your code!