"Denoising"

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- Split random 301 frames to train (80%), test (10%) and validation (10%)
- Converted all images to grayscale

- Input: The model takes an input (e.g., an image) with shape *input_shape*
- Feature Extraction:
- MaxPooling2D: Detects basic features and downsamples.
- Second Iteration of Conv2D & MaxPooling2D: Detects more complex features and downsamples further.
- Flattening: Converts the 2D feature maps into a 1D vector.
- Decision Making:
- Dense(128): Combines features into a higher-level understanding. Dense(2): Outputs the final (x, y) coordinates.

Results

1 Identifying Particles

Image 1: Predicted (232.6, 221.6) vs Actual (441.0, 291.0)

- Optimize downsampling might be muddying precision
- Obtain more data to improve prediction

"Denoising"   *Thank you for listening!*

Any questions?