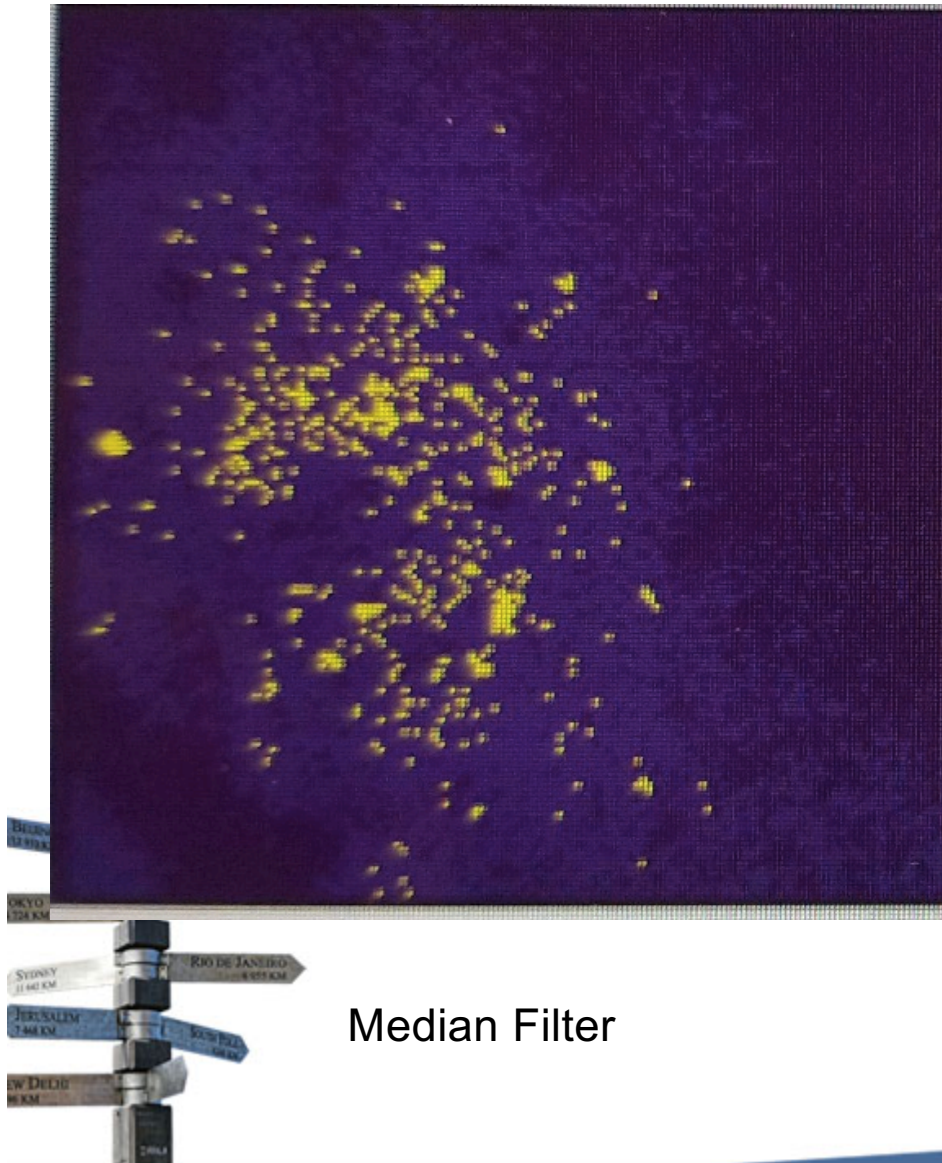


Neuron Finding

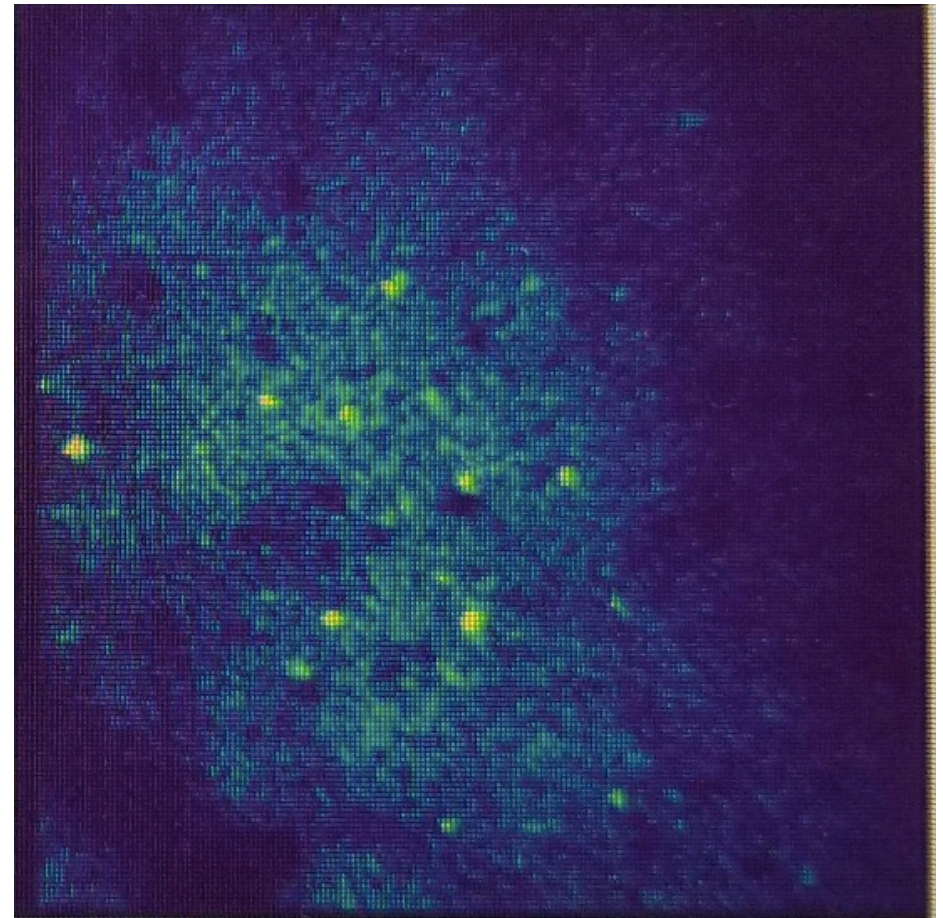
Team Coombs
Anant Tripathi
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Haxing Dai
Sushanth Kathirvelu



Data

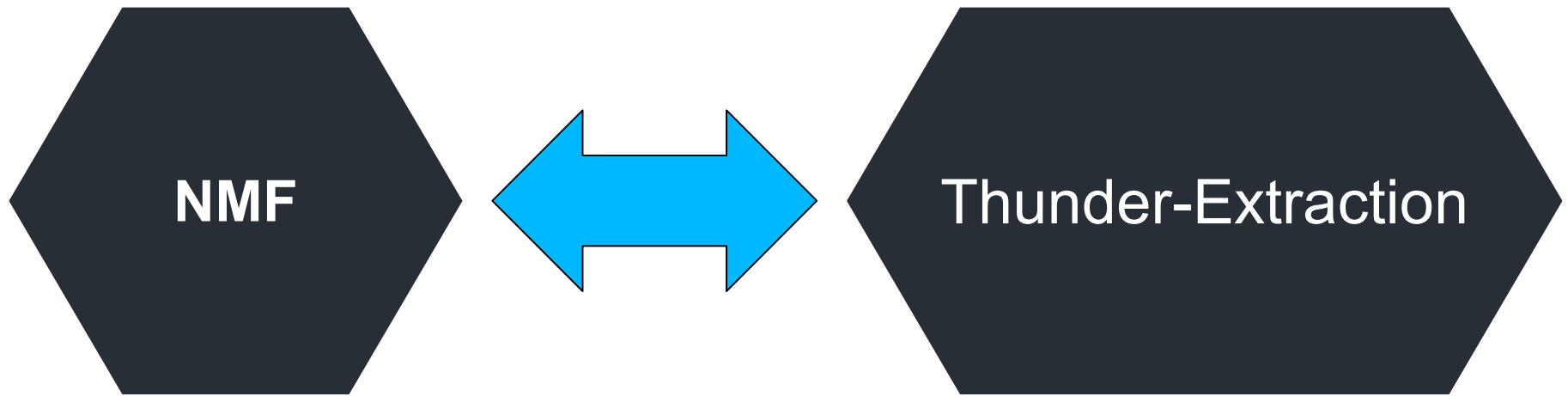


Median Filter



Gaussian Filter

Method



NMF Flow



NMF

Use thunder library on dataset

Fit the model in our algorithm
With various parameters

Transform and merge the
overlapping coordinates.



NMF Flow Result

k	percentile	max_iter	overlap	score
10	98	50	0.1	3.00907
10	98	100	0.1	2.98822
10	97	50	0.1	2.96129
20	99	100	0.2	2.95583



Discussion

Threshold and Segmentation

- Thunder Extraction
- Watershed
- Gaussian filter
- Media filter
- Ostu Threshold

Models

- LSTM model, RNN deal with the sequence data.
- Convert the file to a graph.
- CNN
- UNET





Thank you !