Title of Problem Statement:
Optical-Guided Super-Resolution for Thermal IR Imagery

Dataset:
https://huggingface.co/datasets/torchgeo/ssl4eo_l_benchmark/resolve/main/ssl4eo_l_oli_tirs_toa_benchmark.tar.gz?download=true

It has 11 bands of Landsat 8
OLI sensor 9 bands
TIRS Sensor 2 bands for Thermal Infrared

OLI Spectral Bands[11]			
Spectral Band	**Description**	**Wavelength**	**Resolution**
Band 1	Coastal Aerosol	0.43 - 0.45 µm	30 m
Band 2	Blue	0.450 - 0.51 µm	30 m
Band 3	Green	0.53 - 0.59 µm	30 m
Band 4	Red	0.64 - 0.67 µm	30 m
Band 5	Near-Infrared	0.85 - 0.88 µm	30 m
Band 6	SWIR 1	1.57 - 1.65 µm	30 m
Band 7	SWIR 2	2.11 - 2.29 µm	30 m
Band 8	Panchromatic (PAN)	0.50 - 0.68 µm	15 m
Band 9	Cirrus	1.36 - 1.38 µm	30 m

TIRS Spectral Bands[11]			
Spectral Band	**Description**	**Wavelength**	**Resolution**
Band 10	Thermal infrared 1	10.60 – 11.19 µm	100 m
Band 11	Thermal infrared 2	11.50 – 12.51 µm	100 m

Task Information: Super-resolution of band 10 and band 11 with the use of RGB or multispectral images
Super-Resolution scale 2X or 4X