# Convolutional Implicit Neural Representation of pathology whole-slide images
# (Supplementary Material)
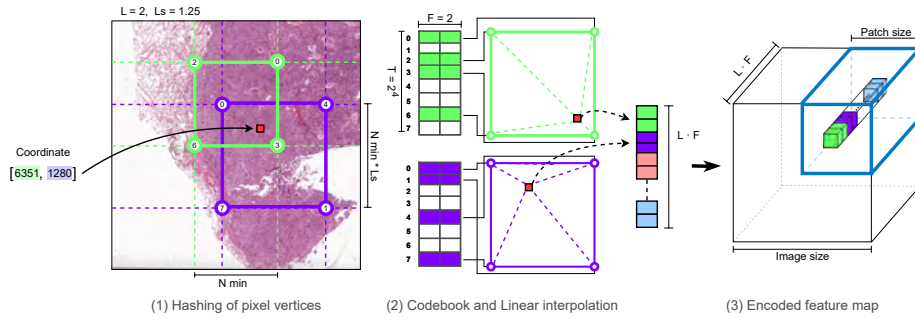


**Fig. 1.** Multi-resolution Hash Grid Encoding: This method sets up $L$ 2D grids across the domain, with each grid representing a different level of resolution. It encodes each grid point via a hash table of size $T$, where each index contains $F$ trainable parameters (features), represented as a feature vector. For any given input coordinate (indicated by the red mark), a feature vector for each resolution level is computed by interpolating nearby grid features.

**Table 1.** Hyperparameters for multi-grid hash encoding

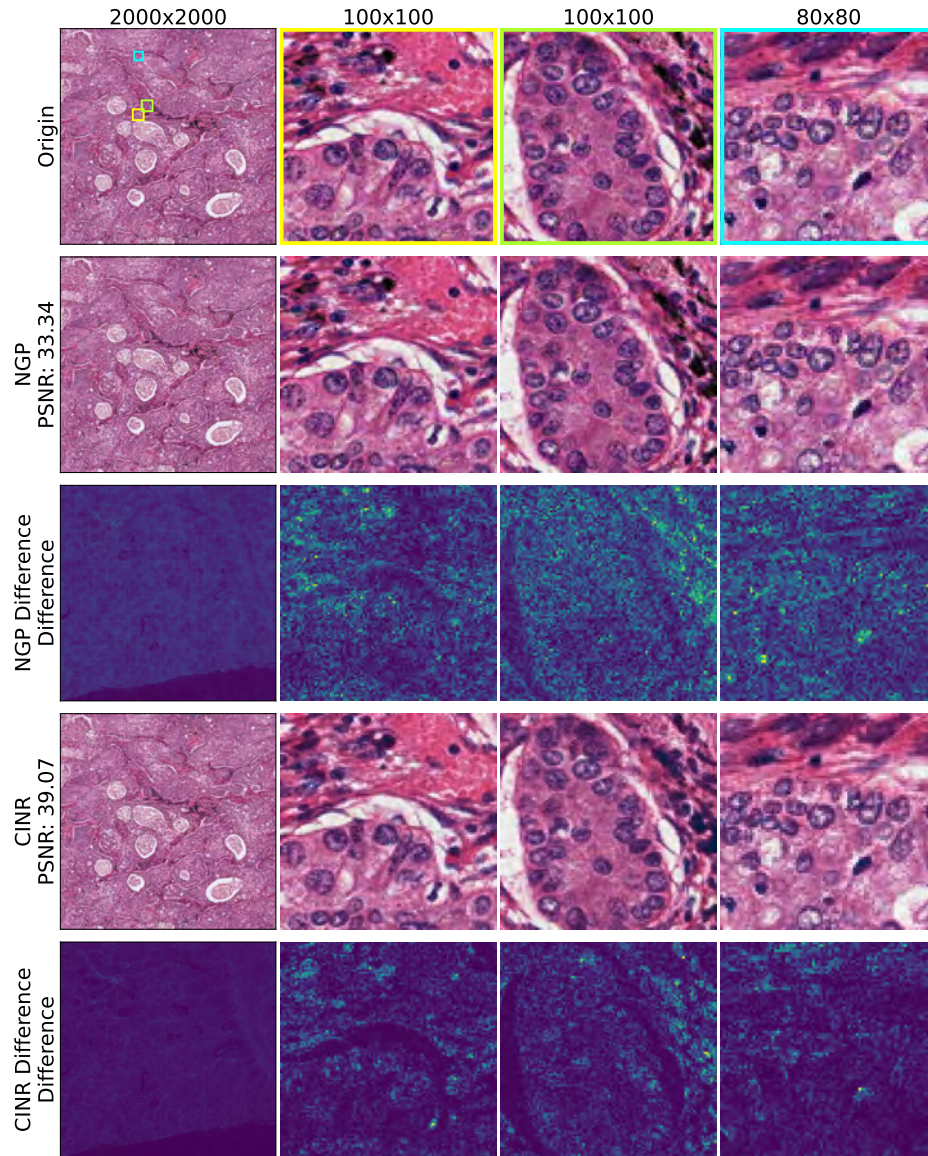| Parameter | Natural images | Pathology images (ours) |
|---|---|---|
| Number of levels($L$) | 16 | 24 |
| Feature dimension($F$) | 2 | 2 |
| Hash table size($T$) | $[2^{14}, 2^{24}]$ | $[2^{20}, 2^{28}]$ |
| Coarsest resolution($N_{min}$) | 16 | 4 |
| Finest resolution($N_{max}$) | $[512, 524288]$ | 44890 |
| Level scale($b$) | $[1.38, 2.0]$ | 1.5 |

**Fig. 2.** Images reconstructed by each model. The first column presents the larger domain, while the subsequent columns feature zoomed-in views of specific local areas outlined by rectangular boxes in the first column images. The images in the first row are the original (ground-truth) images, while the images in the second and fourth row are the reconstructed images. The third and fifth row highlights the differences between the original and reconstructed images.