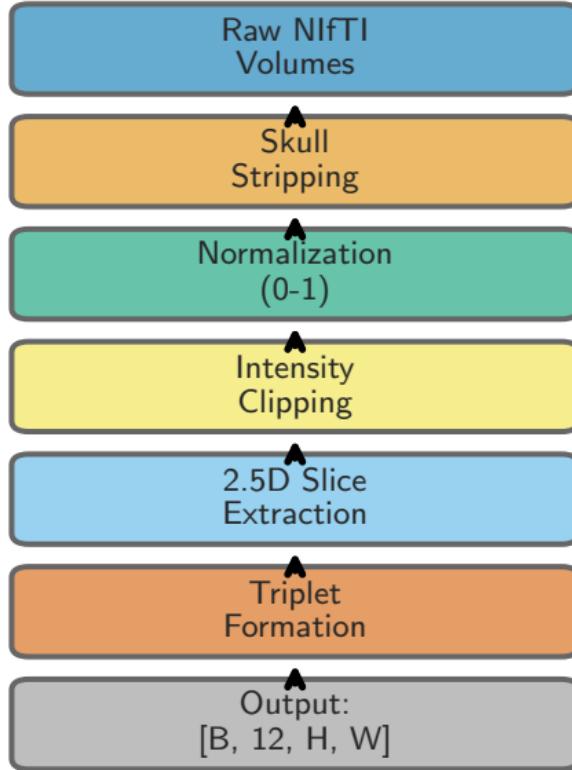


Preprocessing Pipeline: Raw MRI to 2.5D Slice Triplets



4 modalities: T1, T1ce, T2, FLAIR $[H, W, D, 4]$

HD-BET for robust skull stripping

Per-volume min-max normalization

1st-99th percentile clipping

Extract adjacent axial slices $[D - 2, 4, 3, H, W]$

Stack 3 slices \times 4 modalities

Batch \times 12 channels \times 128 \times 1 $[B, 12, H, W]$