Chapter 3
Generalizing Learning-based
Data Acquisition

· MRI domain ·

· Cardiac Imaging ·
· Shape reconstruction ·

· Process modelling ·
· Model design ·
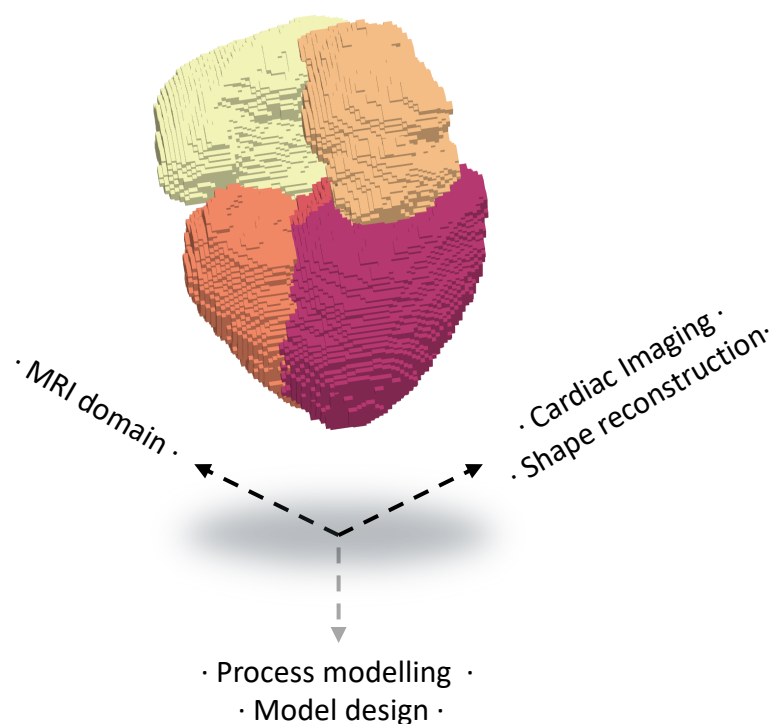
Chapter 4
Generalizing Sample Weighting
and Aggregation Schemes

· MRI domain ·

· Brain Imaging ·
· Vestibular Schwannoma ·
· Segmentation ·

· Data level sample weighting ·
· Loss modification ·
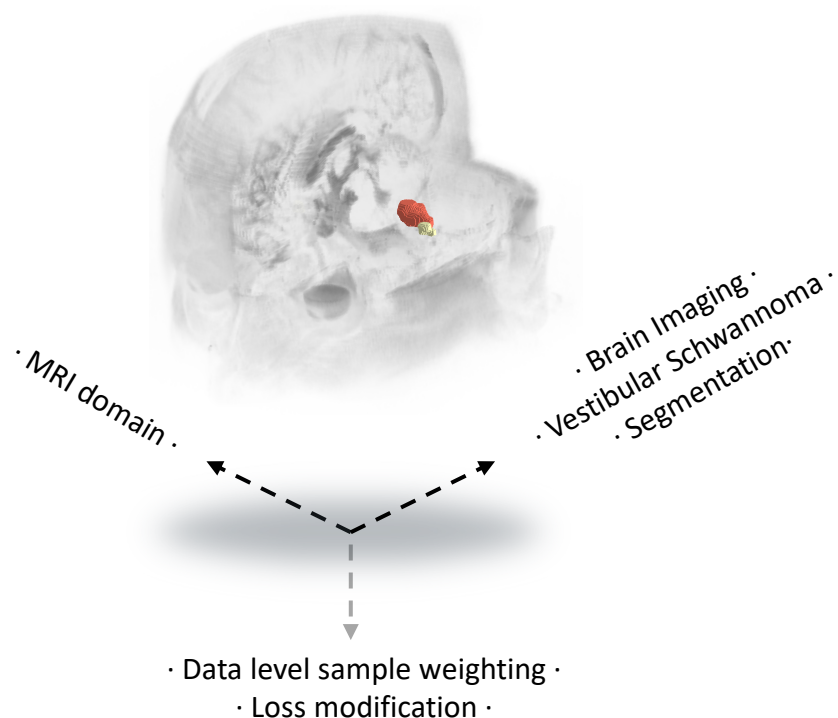
Chapter 5
Generalizing Equivariant
Kernel Architectures

· CT/MRI domain ·

· Abdominal Imaging ·
· Cardiac Imaging ·
· Segmentation ·

· Kernel level modification ·
· Canonical orientations ·
· Symmetry ·
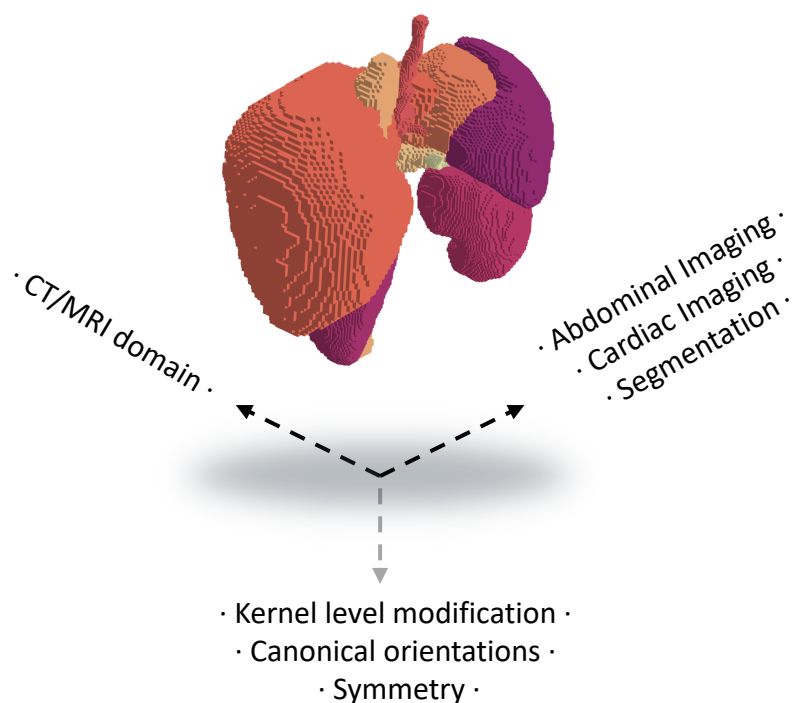
Chapter 6
Generalizing Augmentation-based
Training and Test-time Adaptation

· CT/MRI domain ·

· Whole-body Imaging ·
· Segmentation ·
· Interdomain prediction ·

· Intensity / spatial · augmentation ·
· Training and test-time strategy ·