



SYSTEM AND METHOD FOR SEGMENTATION-AWARE GENERATION OF SYNTHETIC CT IMAGES FROM UNCORRECTED PET DATA

WARF: P250332US01

Inventors: Alan McMillan, Weijie Chen, James Wang

The Invention

UW-Madison researchers have developed a method of generating pseudo-CT data for PET correction from the PET data alone. The approach is executed in three sequential stages: first, a dedicated machine learning model extracts high-quality segmentation maps from full-body non-attenuation-corrected (NAC) PET images; next, a second model converts these segmentation maps into synthetic computed tomography (CT) images; and finally, a third model refines these images by adjusting Hounsfield Units (HU) to ensure quantitative accuracy.

Tech Fields

- [Medical Imaging : Other diagnostic imaging](#)

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846