Smart Super Views – A Knowledge-Assisted Interface for Medical Visualization

Fuzzy Inference System Rules

Rules for Bone / Tissue / Vessel Views

if Vessel is LOW and Bone is LOW and VesselTree is LOW then Method is Tissue
if Vessel is LOW and Bone is MEDIUM and VesselTree is LOW then Method is Bone
if Vessel is LOW and Bone is HIGH and VesselTree is LOW then Method is Bone
if Vessel is MEDIUM and Bone is LOW and VesselTree is LOW then Method is Tissue
if Vessel is MEDIUM and Bone is MEDIUM and VesselTree is LOW then Method is Tissue
if Vessel is MEDIUM and Bone is HIGH and VesselTree is LOW then Method is Bone
if Vessel is HIGH and Bone is LOW and VesselTree is LOW then Method is Tissue
if Vessel is HIGH and Bone is MEDIUM and VesselTree is LOW then Method is Tissue
if Vessel is HIGH and Bone is HIGH and VesselTree is LOW then Method is Tissue
if Vessel is LOW and Bone is LOW and VesselTree is MEDIUM then Method is Vessel
if Vessel is LOW and Bone is MEDIUM and VesselTree is MEDIUM then Method is Vessel
if Vessel is LOW and Bone is HIGH and VesselTree is MEDIUM then Method is Tissue
if Vessel is MEDIUM and Bone is LOW and VesselTree is MEDIUM then Method is Vessel
if Vessel is MEDIUM and Bone is MEDIUM and VesselTree is MEDIUM then Method is Vessel
if Vessel is MEDIUM and Bone is HIGH and VesselTree is MEDIUM then Method is Vessel
if Vessel is HIGH and Bone is LOW and VesselTree is MEDIUM then Method is Vessel
if Vessel is HIGH and Bone is MEDIUM and VesselTree is MEDIUM then Method is Vessel
if Vessel is HIGH and Bone is HIGH and VesselTree is MEDIUM then Method is Vessel
if Vessel is LOW and Bone is LOW and VesselTree is HIGH then Method is Vessel
if Vessel is LOW and Bone is MEDIUM and VesselTree is HIGH then Method is Vessel
if Vessel is LOW and Bone is HIGH and VesselTree is HIGH then Method is Vessel
if Vessel is MEDIUM and Bone is LOW and VesselTree is HIGH then Method is Vessel
if Vessel is MEDIUM and Bone is MEDIUM and VesselTree is HIGH then Method is Vessel
if Vessel is MEDIUM and Bone is HIGH and VesselTree is HIGH then Method is Vessel
if Vessel is HIGH and Bone is LOW and VesselTree is HIGH then Method is Vessel
if Vessel is HIGH and Bone is MEDIUM and VesselTree is HIGH then Method is Vessel
if Vessel is HIGH and Bone is HIGH and VesselTree is HIGH then Method is Vessel

Rules for Oblique / Coronal / Sagittal / Axial Slice Views

if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Axial
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Coronal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Coronal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Sagittal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Sagittal or Coronal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Coronal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Sagittal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Sagittal
if VesselTree is LOW and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Sagittal or Coronal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Axial
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Axial or Coronal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Coronal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Axial or Sagittal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Axial
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Coronal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Sagittal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Sagittal
if VesselTree is LOW and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Sagittal or Coronal
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Axial
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Axial
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Axial or Coronal

if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Axial
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Axial
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Axial or Coronal
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Axial or Sagittal
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Axial or Sagittal
if VesselTree is LOW and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Axial
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique or Coronal
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique or Sagittal
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique or Coronal
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique or Sagittal
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique or Sagittal
if VesselTree is MEDIUM and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique or Sagittal or Coronal
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique or Coronal
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique or Coronal
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique or Sagittal
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique or Sagittal
if VesselTree is MEDIUM and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique or Sagittal or Coronal
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique or Axial or Coronal
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique or Axial
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique or Axial or Coronal
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique or Axial or Sagittal
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique or Axial or Sagittal
if VesselTree is MEDIUM and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique or Axial
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is LOW and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is MEDIUM and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is LOW and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is MEDIUM and CoronalSlice is HIGH then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is LOW then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is MEDIUM then Slice is Oblique
if VesselTree is HIGH and AxialSlice is HIGH and SagittalSlice is HIGH and CoronalSlice is HIGH then Slice is Oblique