



System And Method For Simultaneous Image Artifact Reduction And Tomographic Reconstruction Of Images Depicting Temporal Contrast Dynamics

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Inventors: Guang-Hong Chen

The Invention

Described here is a system and method for image reconstruction that can automatically and iteratively produce multiple images from one set of acquired data, in which each of these multiple images corresponds to a subset of the acquired data that is self-consistent, but inconsistent with other subsets of the acquired data. The image reconstruction includes iteratively minimizing the rank of an image matrix whose columns each correspond to a different image, and in which one column corresponds to a user-provided prior image of the subject. The rank minimization is constrained subject to a consistency condition that enforces consistency between the forward projection of each column in the image matrix and a respective subset of the acquired data that contains data that is consistent with data in the subset, but inconsistent with data not in the subset.

Additional Information

For More Information About the Inventors

- [Guang-Hong Chen](#)

Tech Fields

- [Medical Imaging : X-ray](#)

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