SYSTEM AND METHOD FOR CONTROLLING ZERO-COUNT ERRORS IN COMPUTED TOMOGRAPHY

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Inventors: Guang-Hong Chen, Ke Li

The Invention

UW Madison inventors have developed methods to properly address the zero-count problem in ultra-low radiation dose photon counting CT imaging that includes acquiring or accessing CT data of a subject, identifying zero counts in the CT data, and replacing the zero counts in the CT data with at least one non-zero number to create zero-count free CT data. The method includes estimating a probability function of the zero-count free CT data, removing bias in the zero-count free CT data using the probability function, and reconstructing the zero-count free CT data after removal of the bias to create a corrected image of the subject with preserved conditional independence and spatial resolution.

Additional Information

For More Information About the Inventors

- Guang-Hong Chen
- Ke Li

Tech Fields

- Medical Imaging : CT

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