

# Fuzzy Edge Detection In Computed Tomography Through Particle Swarm Optimization

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**Abstract :** In this paper, we propose a new approach using particle swarm optimization (PSO) for image reconstructions, in which we use the fuzzy inference penalty instead of the Bayesian inference penalty, and particle swarm optimization instead of local method of optimization. We saw that the PSO algorithm just work on the behavior of the individual to reach the best result of the population.

**Keywords :** Computed tomography, Non destructive testing, Bayesian Inference, Fuzzy inference, Particle Swarm Optimization