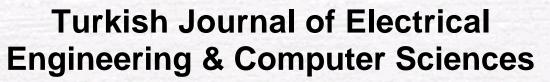
Turkish Journal

of

Electrical Engineering & Computer Sciences

C Keywords



Genetic Approach for the Determination of Object Parameters from X Ray Projections

Tayfun Günel, Sedef Kent İstanbul Technical University, Electrical and Electronics Engineering Faculty, Electronics and Communication Engineering Department, 80626 Maslak, İstanbul-TURKEY

Abstract: In this study, a new method is presented, based on genetic algorithms for determining object parameters such as radii and/or attenuation coefficients with some assumptions and estimating a cross-sectional image of an object from its projections obtained by X ray illumination. After it was tested for projections degraded by different random noise levels, it was observed that the genetic and fuzzy genetic algorithms improved the signal to noise ratio of the projections. The fuzzy genetic algorithm gave better results than the genetic algorithm.

elektrik@tubitak.gov.trTurk. J. Elec. Eng. & Comp. Sci., 6, (1998), 277-286.Scientific Journals Home PageOther articles published in the same issue: Turk. J. Elec. Eng. & Comp. Sci.,vol.6,iss.3.