K C Santosh

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Automated chest X-ray screening for the evidence of pulmonary abnormalities

The talk is aimed at presenting an automatic chest X-rays screening system to detect pulmonary abnormalities using ches X-rays (CXR) in non-hospital settings. In particular, the primary motivator of the project is the need for screening HIV+ populations in resource-constrained regions for the evidence of Tuberculosis (TB). e system analyzes thoracic edge map, shapes as well as symmetry that exists between the lung sections of the posteroanterior CXRs. In this study, we have us two CXR benchmark collections made available by the U.S. National Library of Medicine and have achieved a maximum abnormality detection accuracy of 88.67% and the corresponding area under the ROC curve of 0.95, which outperforms the reported state-of-the-art.

Biography

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