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Design and Implementation of Partial Denoising Boundary Image Matching Using Indexing Techniques

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Abstract : In this paper, we design and implement a partial denoising boundary image matching system using indexing techniques. Converting boundary images to time-series makes it feasible to perform fast search using indexes even on a very large image database. Thus, using this converting method we develop a client-server system based on the previous partial denoising research in the GUI (graphical user interface) environment. The client first converts a query image given by a user to a time-series and sends denoising parameters and the tolerance with this time-series to the server. The server identifies similar images from the index by evaluating a range query, which is constructed using inputs given from the client, and sends the resulting images to the client. Experimental results show that our system provides much intuitive and accurate matching result.

Keywords: boundary image matching, indexing, partial denoising, time-series matching

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