

Public Abstract

First Name:Muxi

Middle Name:

Last Name:Chen

Adviser's First Name:Uhlmann

Adviser's Last Name:Jeffrey

Co-Adviser's First Name:

Co-Adviser's Last Name:

Graduation Term:SP 2016

Department:Computer Science

Degree:MS

Title:Fast Digital Inpainting Algorithm For Real-time Video Inpainting Problem

The paper examines a simple and efficient method to solve the digital inpainting problem with a reasonable result by processing the information locally around the inpainting area. The method is based on a unique matrix transformation algorithm. It can extract the horizontal and vertical structural information from the surrounding area of the target area which we want to inpaint. By combining the extracted structural information with a simple inpainting algorithm, we can solve the inpainting problem efficiently and apply the featured algorithm in many real-time systems like real-time stream video which may have potential inpainting problems.