Graphical Introduction to My Research

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Research Topics

- Multivariate Splines
- Smooth Surface Reconstruction
- Spline Methods for Numerical PDEs
- Generalized Barycentric Coordinates
- Wavelets and Framelets
- Image Edge Extraction
- Sparse Solution to Underdetermined Linear System
- Matrix Completion and Compression
- Graph Clustering
- Graph Sparsification
- Phase Retrieval
Blood Vessel Data
Spline Surface of Blood Vessel Data
Spline Surface of Blood Vessel Data 2
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A Set of Medical Data
Box Splines for Edges of Heart Images
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Region of Interest
Spline Approximation of the Solid of Interest
A Set of Brain Cross Sections
Box Splines for Tissue Separation
Splines for Brain Reconstruction
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Image Reconstruction

a given partial matrix

recovered image
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Adaptive Triangulations

The Original Function

Adaptive Triangulation
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Thank You
Thank You Again