Course Announcement

Image Processing and Reconstruction Tomography

BioE C165/EE C145B
Spring 2004

TuTh 12:30-2:00
458 Evans Hall
Instructor: MALTZ, Jonathan
Course Control Number: 07375
Units: 4
Final Exam Group: 14

Theory of image formation

Multidimensional Fourier transform

Image enhancement and restoration

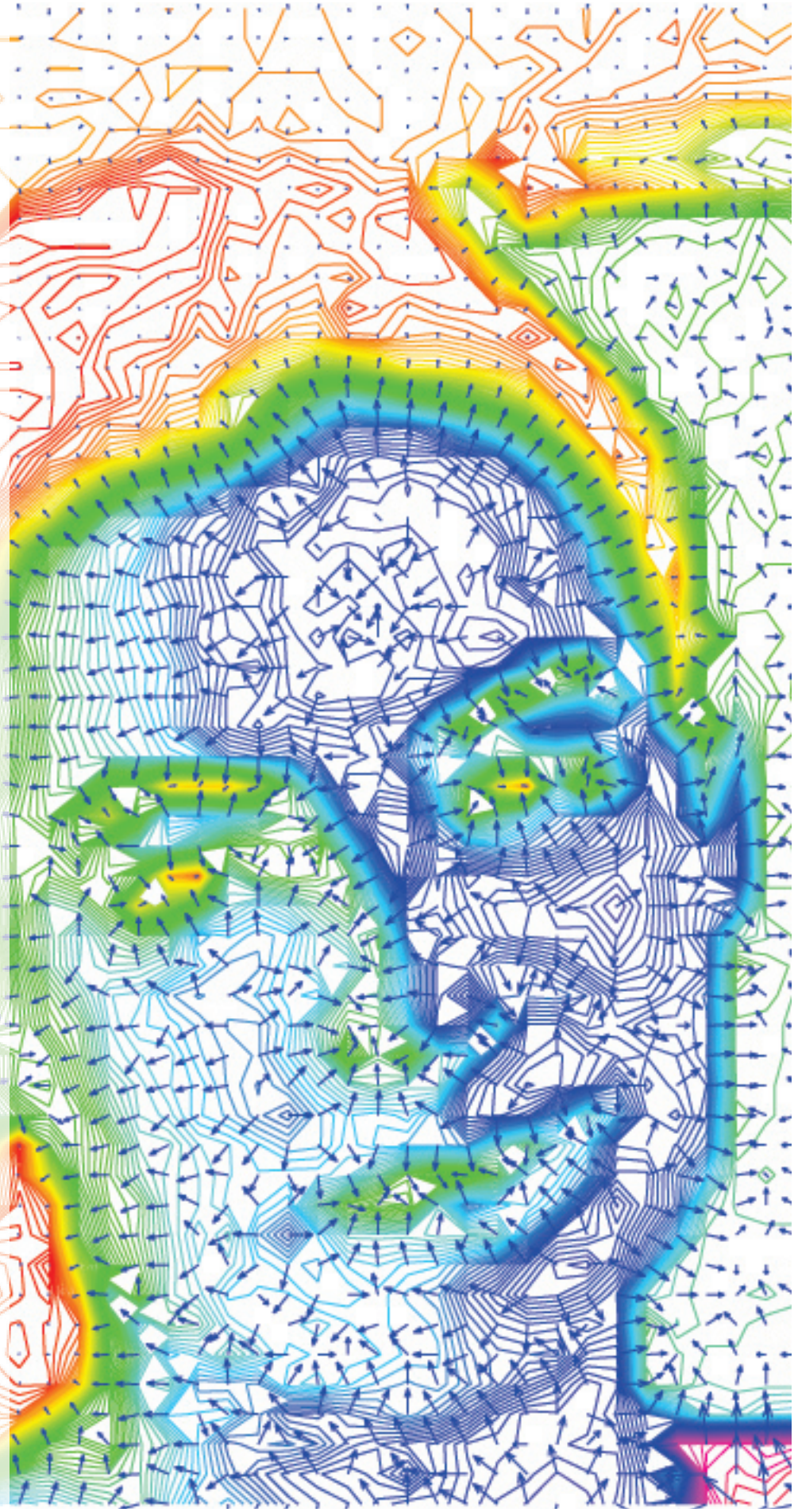
Singular value decomposition

Radon transform

Tomographic image reconstruction

x-ray and gamma ray imaging physics

Medical imaging: CT, SPECT, PET, MRI, ultrasound, optical imaging

Molecular imaging

Hands-on image processing using Matlab