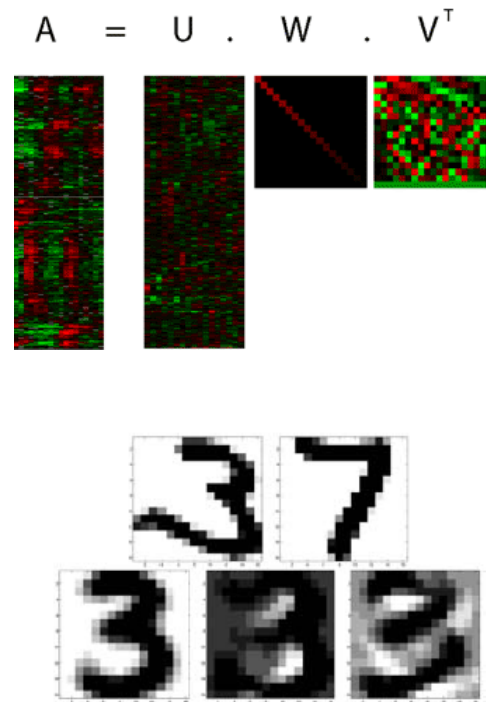
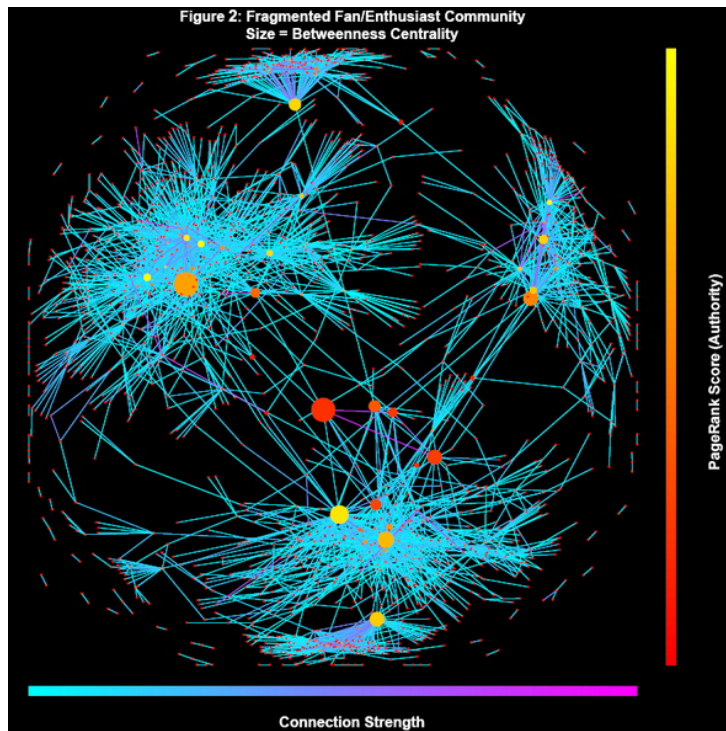


Course Announcement

EECS 498: Advanced Signal Processing & Applications



Course Number: EECS 498

Credit Hours: 3 (counts as a 400L Upper Level EE Elective, a System Core Elective and as flexible technical elective for CS)

Instructor: Prof. Raj Rao Nadakuditi

Lectures: Tuesday & Thursday 1:30 pm – 3:00 pm, 1003 EECS

Prerequisites: EECS 451, EECS 401 or permission of the instructor

Description: This is a course on advanced topics in signal processing designed to follow up on principles learned in EECS 451 and EECS 401. The central theme of the course is the application of tools from linear algebra to signal processing. Theoretical topics include solving least-squares problems, eigenvalues and eigenvectors, the singular value decomposition, Markov chains, power method. Synergistic applications covered include image compression, handwriting recognition, Google's PageRank algorithm, eigen-faces, community detection in networks, and deconvolution. Students are expected to be familiar with material covered in EECS 451 and EECS 401 and should have basic MATLAB programming skills (such as writing loops, plotting functions, etc.)