

Option Supervisor, Biomedical Systems

Director, [Center for Communications and Signal Processing](#)

Acting Director, [Center for Digital and Computational Video](#)

Ph.D. Electrical Engineering 1964 [Michigan State University](#)

### **Research Interests**

Biomedical systems, biomedical imaging and biomedical image processing. Communication systems and networks. Digital image and video processing. VLSI implementations; system on a chip (bio-sensing, DNA microarrays, opto-electronics, MEMS, digital, analog), 3-D SOCs.

### **POST-DOCTORAL AND RESEARCH ASSISTANTSHIP OPPORTUNITIES**

#### **Courses Taught**

##### **In Recent Years:**

EEL 6935 Biomedical Systems and Pattern Recognition

EEL 6935 System on a Chip

EEL 6936 Biomedical Image Processing

EEL 5357 Analog CMOS/VLSI Design

##### **In the Past**

EEL 5344 Digital CMOS/VLSI Design

EEL 6593 Mobile and Personal Communication

EEL 6534 Communication Systems I

EEL 6535 Communication Systems II

EEL 6506 Broadband Communication Networks

EEL 6509 Satellite Communications

EEL 6592 Digital Video and Multimedia

EEL 5755 (now EEL 6502) Digital Signal Processing

EEL 5759 Microprocessor Based DSP

EEL 6752 Digital Signal Processing II

EEL 6753 Digital Signal Processing III

EEL 6820 Image Processing

EEL 6935 Speech Signal Processing

EEL 6825 Pattern Recognition