

DEEPAK PAL

Project Associate

Department of Electrical Engineering

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CAREER VISION

To work in a challenging environment demanding all my skills and efforts to explore and adapt myself in different fields and realize my potential where I get the opportunity for continuous learning.

RELEVANT EXPERIENCE

Department of Electrical Engineering, Indian Institute of Technology, Kanpur, India

Dec, 2010 - Present

Project Associate

Prof. Aditya K. Jagannathan, Multimedia Wireless Networks Lab, IIT Kanpur

- Developed robust MPEG encoder in MATLAB and C that performs streaming of live videos over wireless network
- Set up a wireless link, supporting radio data rate up to 250 kbps for transmission of images and small sized video using TELOS B motes on TINY OS platform using JAVA
- Developed H.261 video encoder and decoder on MATLAB Platform
- Performed study of JSVM (Joint Scalable Video Model) for h.264 compliant bitstream generation and transmission
- Currently developing H.264/SVC codec to achieve video streaming of live events on IIT Kanpur campus wireless infrastructure

Department of Electrical Engineering, Indian Institute of Technology, Kanpur, India

Aug, 2010 - Nov 2010

Project Fellow

Prof. Aditya K. Jagannathan, Multimedia Wireless Networks Lab, IIT Kanpur

- Developed GUI for transmission and reception of digital images over AWGN and RAYLEIGH channel with noise filtering mechanism at the receiver on MATLAB Platform
- Performed extensive work in video motion estimation, morphological image processing, aliasing, transform coding, 2D sampling, filtering and interpolation
- Developed JPEG encoder and decoder on MATLAB platform

TECHNICAL SKILLS

Languages

- | | | | | |
|-------------------------|--------------------|--|---------|-----------------------|
| • MATLAB | (EXPERT, 3 Years) | | C | (ADVANCED, 2.5 Years) |
| • HTML, CSS, JAVASCRIPT | (MEDIUM, 6 months) | | Verilog | (FAMILIAR, 3 Months) |

Tools and Libraries

- | | | | | | | | | |
|--------------------------|--|---------|--|-------------|--|------------|--|--------|
| • Visual Studio | | Eclipse | | Dreamweaver | | Xilinx IDE | | Cygwin |
| • GNU Scientific Library | | Open CV | | JRTP | | | | |

Operating Systems

- | | | |
|--------------------------|--|----------------|
| • Windows - 7, Vista, XP | | Linux - Ubuntu |
|--------------------------|--|----------------|

EDUCATIONAL QUALIFICATIONS

Bachelor of Technology in Electronics and Communication Engineering (UPTU, Percentage - 70.02 %)

Galgotias College of Engineering and Technology

Aug 2006 - Jun 2010

Intermediate (UP Board, Percentage - 79.4 %)

Lucknow Public Inter College

May 2004

High School (UP Board, Percentage - 65.8 %)

St Peters High School

Jun 2002

PROJECTS

MULTIMEDIA TRANSMISSION OVER WIRELESS

Nov 2010 - Present

Details

- Objective - Implement a video coding standard to enable transmission and unpacking at multiple spatio-temporal resolutions with variegated bitrates so as to make video streaming readily suited for wireless networks