

CURRICULUM VITAE

P. Chiranjeevi

email: chiru.pojala@gmail.com

Present address:

Room No: S9,
B.C Roy hall of residence,
IIT Kharagpur,
West Bengal-721302, India.
Phone no: +91-7602449393

Permanent address:

N.R Agraharam (village),
Sathyavedu (post),
Chittoor (district),
Andhra Pradesh-517588, India.
Phone no: +91-8985662440

Research interests: **digital Image processing & video processing, pattern Recognition, machine learning, soft computing tools, fuzzy systems, signal processing.**

Education details:

Degree	Specialization/Area of Research	College	%/C GPA	Year of passing
Ph.D.	Moving Object Segmentation and Tracking: Mitigating Challenges	Indian Institute of Technology, Kharagpur	NA	Jul 2008- Jul 2012
M.Tech	Visual Information Processing and Embedded Systems	Indian Institute of Technology, Kharagpur	7.69/ 10	Jul 2006- May 2008
B.Tech	Electronics and Communication Engineering	Sree Vidhyanikethan Engineering College, Tirupati (JNTU Hyderabad)	71.62	Oct 2001- May 2005
Inter	M.P.C	Narayana Residential Junior College, Nellore	92.5	Jun 1999- Apr 2001
S.S.C		Govt High School, Sathyavedu	77	Apr 1999

PhD Research: Moving Object Segmentation and Tracking: Mitigating Challenges under the guidance of Prof. S. Sengupta, E & ECE Dept. IIT Kharagpur.

Description: This research aims at detecting moving objects under various challenging situations, such as illumination variation, low contrast, shadows, camera jitter, and dynamic backgrounds - rippling water, waving trees etc., by employing robust background modeling algorithms, and it has applications in visual surveillance, object based video coding, etc.

Object tracking in video sequences under various challenging situations, such as occlusion, illumination variation, pose variation, out of plane rotation, non-linear object motion, background clutter etc., by using a novel observation model and fuzzy fusion of features under improved particle filter framework.

Coding: C language

M. Tech project: *Study of image segmentation techniques* under the guidance of Prof. A.K Ray, E & ECE Dept. IIT Kharagpur.

Description: This project aims at segmenting the objects present in the image, based on intensity and texture features, by using various image segmentation algorithms.

B.Tech Project: *Implementation of OFDM on TMS320C5416 DSP Processor*

Description: OFDM is a digital multi-carrier modulation scheme, which uses a large number of closely-spaced orthogonal sub carriers. A simple OFDM transmitter and receiver was Implemented. Transmitter consists of QPSK modulation and IFFT. Receiver consists of FFT and QPSK demodulator.

Mini projects:

- **MPEG-1 coding of video frames**, under the guidance of Prof S. Sengupta, Dept of Electronics and Electrical communication engineering, IIT kharagpur.
- **Designed an 8-bit microcontroller using VHDL**, as a part of embedded systems design laboratory assignment, under the guidance of Prof. Santanu Chattopadhyay, Dept. of Electronics and Electrical communication engineering, IIT Kharagpur.
- **Designed electronic security system** under the guidance of Prof P.Nageswara rao, Department of Electronics and Communication Engineering, Sree Vidhyanikethan Engineering College, Tirupathi.

Accepted/Under Review Journal/Conference Papers:

1. P. Chiranjeevi and S. Sengupta, "**Moving object detection in the presence of dynamic backgrounds using intensity and textural features**", J. Electron. Imaging (SPIE), vol. 20, 043009, 2011.
2. P.Chiranjeevi and S.Sengupta, "**Spatially correlated background subtraction, based on adaptive background maintenance**", J. Vis. Commun. Image R. (Elsevier), vol.23, no.6, pp.948-957, 2012.
3. P.Chiranjeevi and S.Sengupta, "**New Fuzzy Texture Features for Robust Detection of Moving Objects**", IEEE Signal Process. Lett., 2012.(In press)
4. P.Chiranjeevi and S.Sengupta, "**Robust detection of moving objects in video sequences through rough set theory framework**", image and vision computing (Elsevier), 2012. (In press)
5. P.Chiranjeevi and S.Sengupta, "**Detection of Moving Objects Using Multi-color Kernel Fuzzy Correlogram Based Background Subtraction**", IEEE trans. Image proces., 2012.(under revision)

6. P.Chiranjeevi and S.Sengupta, "**Fuzzy aggregation of intensity and texture features for robust detection of moving objects**", IEEE trans. Image proces., 2012 (under review)
7. P.Chiranjeevi and S.Sengupta, "**Detection of Moving Objects Using Fuzzy Correlogram Based Background Subtraction**", IEEE conf. ICSIPA 2011.
8. P.Chiranjeevi and S.Sengupta, "**Object tracking using improved fuzzy particle filter in rough set theory framework**", (to be communicated)
9. P. Chiranjeevi and S. Sengupta, "**Adaptive fuzzy particle filter based on rough set theory and fuzzy texture features for Object tracking**", (to be communicated)
10. P. Chiranjeevi and S. Sengupta, "**Application of type-2 fuzzy integral to fuse intensity and fuzzy texture for moving object segmentation**", (to be communicated)

PG courses taken

1. Digital image processing
2. Pattern recognition and image understanding
3. Multimedia systems
4. Data structures and object representation
5. Design and analysis of algorithms
6. Embedded systems design
7. Computer communication and networking

Skill set:

Programming Languages: C, C++, Assembly languages (8085, 8086, 8051),
Matlab2010a/b

Operating systems : WINDOWS XP/7

Image processing library: OpenCV

Personnel Skills : Positive Attitude, Smart Work, Self Confidence.

Achievements:

- Secured All India Rank: 149th out of 38,000 students with a gate score of 638 and percentile of 99.59 in GATE 2006.
- Secured 3584th rank out of 1,30,000 in engineering entrance examination in 2001.
- Secured state 717th rank out of 100,000 students in polytechnic entrance examination in 1999.

Personal details:

Father's name : P. Chakrapani
Nationality : Indian
Sex : Male
Date of birth : 12th June 1984
Languages known : Telugu, English, Tamil, Hindi
Hobbies : Listening to music.
Passport No : G7462812

Extra curricular activities:

- Member in the Organizing committee of the farewell function to seniors in Sree vidhyanikethan Engineering College.
- Member in the Organizing committee of the farewell function to seniors in IIT Kharagpur.
- Acted as an Executive member for Electronics and communication association in B.Tech.

Recommendations can be taken from these Professors

Prof. S.Sengupta	Prof. P. K. Biswas	Prof. J Mukhopadhyay
Professor	Professor	Professor
E & ECE Dept	E & ECE Dept	Computer Science & Engineering
IIT Kharagpur. WB	IIT Kharagpur. WB	IIT Kharagpur. WB
ssg@ece.iitkgp.ernet.in	pkb@ece.iitkgp.ernet.in	jay@cse.iitkgp.ernet.in

I hereby declare that all the information provided by me in this application is factual and correct to the best of my knowledge and belief

Place: Kharagpur

P.CHIRANJEEVI