

# Lalit Manam

Dept. of Electrical Engineering  
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## Education

*Ph.D* - Electrical Engineering (9.1/10) 2018-present  
Indian Institute of Science Bengaluru  
Advisor: Prof Venu Madhav Govindu  
*B.Tech.* - Electronics and Communication Engineering (9.41/10) 2013-2017  
National Institute of Technology Silchar

## Experience

Teaching Assistant Oct 2020-present  
- *Indian Institute of Science, Bengaluru*

- Course: Stochastic Models and Applications (E1 222).
- Instructor: Prof. P S Sastry

Software Developer Jul 2017-Jul 2018  
- *AMDOCS Development Center India LLP*

- Involved in development of billing solutions for telecommunication industry.

## Projects

- Restoration of images corrupted by various noises using fuzzy based approaches Jul 2016–May 2017

- Developed different methods for removal of impulse noise from colour images.
- Work published in different journals/conferences.

- K-Map Windows App Mar 2015

- Developed an application to solve 4 variable K-Map in Sum-of-Product (SOP) form.
- <https://www.youtube.com/watch?v=lqLGpYOKIwQ>

## Research Papers

- A. Roy, L. Manam, R.H. Laskar, "Removal of 'Salt & Pepper' noise from color images using Adaptive Fuzzy Technique based on Histogram Estimation", *Multimedia Tools and Applications*, doi.org/10.1007/s11042-020-09107-x.  
- A. Roy, L. Manam and R.H. Laskar, "Region adaptive fuzzy filter: an approach for removal of random valued impulse noise", *IEEE Transactions on Industrial Electronics*, vol. 65, no. 9, pp. 7268-7278, Sept. 2018.  
- L. Manam, A. Roy, R. H. Laskar and F. A. Talukdar, "Removal of fixed valued impulse noise using global noise statistics based adaptive histogram fuzzy filter", *TENCON 2017 - 2017 IEEE Region 10 Conference*, pp. 2231-2235, Nov. 2017.  
- A. Roy, J. Singha, L. Manam, R.H. Laskar, "Combination of adaptive vector median filter and weighted mean filter for removal of high density impulse noise from color images", *IET Image Processing*, vol. 11, no. 6, pp. 352-361, Jan. 2017.

## Skills & Technologies

- C, C++, Visual C#, Python, MATLAB  
- Basic ability with SQL,  $\text{\LaTeX}$

## Relevant courses

- Computer Vision  
- Stochastic models and applications  
- Linear and non-linear optimization  
- Convex optimization  
- Machine Learning

## Honours and Awards

-Received Academic Excellence Award and a Silver medal at NIT Silchar for scoring highest CPI (May 2017)  
-Awarded Best Volunteer 2015 in Administration at Children of Hope India (Silchar based NGO) (Feb 2016)

- Invited for Dewang Mehta felicitation of engineering students at Kaziranga University, Jorhat (Aug 2015)
- Received academic excellence certification and a silver medal at Delhi Public School Dhanbad (July 2013)

### **Extra Curriculars**

- Volunteer in Administration at Children of Hope India (March '15 – April '16).
- 1st runner up of Bang Bang; event under Tronix Week'14, NIT Silchar.
- Conducted C Programming classes under Robotics Club, NIT Silchar (Aug – Nov '14).
- Organised events under ECS Society and Robotics Club, NIT Silchar.
- Participated in NITSMUN in Sept '14 as delegate of Nigeria.

### **Hobbies and Interests**

Technology, Programming  
Volunteering, Organising, Management

### **References**

- Prof Venu Madhav Govindu, Indian Institute of Science Bengaluru
- Prof Rabul Laskar, National Institute of Technology Silchar
- Prof Fazal Talukdar, National Institute of Technology Silchar