

## EDUCATION

**Professional Master's (Embedded and Cyber-Physical Systems)** 2019-2020 (Expected)  
*University of California, Irvine, USA*

**Doctor of Philosophy (CGPA 9.57/10)** 2014-2019  
*Visvesvaraya National Institute of Technology, Nagpur, India*

- Thesis: Image and Video Compression Techniques in CIE  $La^*b^*$  Color Space.
- Relevant Courses: Pattern Recognition, Image Analysis and Computer Vision.

**Master of Technology (Communication Systems Engineering) (CGPA 8.96/10)** 2012-2014  
*Visvesvaraya National Institute of Technology, Nagpur, India*

- Project: Histogram-based segmentation of color images using Genetic Algorithms.
- Relevant Courses: Fuzzy Logic & Neural Networks, Digital Image Processing, Statistical Signal Analysis, Embedded System.

**Bachelor of Engineering (Electronics & Comm. Engg.) (73.71%)(1st Division)** 2007-2011  
*Shri Ramdeobaba Kamla Nehru Engineering College, Nagpur, India*

- Project: Detecting speed of cars using video sequences.

## PUBLICATIONS

1. **S. Y. Kahu**, K. M. Bhurchandi, "A low-complexity, sequential video compression scheme using frame differential directional filter bank decomposition in CIE  $La^*b^*$  color space," *IEEE Access*, vol. 5, pp. 14914-14929, 2017.
2. **S. Y. Kahu**, K. M. Bhurchandi, "JPEG-based variable block-size image compression using CIE  $La^*b^*$  color space," *KSII Transactions on Internet and Information Systems.*, vol. 12, no. 10, pp. 5056 - 5078, 2018.
3. **S. Y. Kahu**, R. B. Raut, K. M. Bhurchandi, "Review and evaluation of color spaces for image/video compression," *Color Research and Application, Wiley*, vol. 44, no. 1, pp. 8 - 33, 2019.
4. P. Sneha Latha, Pawan Kumar, **S. Y. Kahu**, K. M. Bhurchandi, "Segmentation of color images using genetic algorithm with image histogram," *7th International Conference on Machine Vision 2014*, Milano, Italy.

## PROFESSIONAL EXPERIENCE

**Associate SQA Engineer** 2011-2012  
*Marvell India Pvt. Ltd., Pune, India*  
 Pre-certification testing of Wi-Fi devices and access points.

## AREAS OF SPECIALIZATION

Video Compression  
 Image Compression

Wavelet Transform  
 Contourlet Transform

Color Spaces  
 JND-based Quantization

## SKILLS

Programming Languages  
 Softwares

MATLAB, C, Java, Python  
 JM reference software for H.264/AVC