# Samruddhi Kahu Curriculum Vitae

## **CONTACT DETAILS**

Address 26035 Moulton Pkwy Laguna Hills CA 92653.

Phone (+1) (949) 690-8659

Mail samruddhikahu@students.vnit.ac.in

# **RESEARCH INTERESTS**

Video Compression Contourlet Transform

Image Compression Color Spaces

Wavelet Transform JND-based Quantization

## **EDUCATION**

Doctor of Philisophy (Ph. D. Candidate) (CGPA 9.57/10)

2014-2019 (Expected)

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 and Neural Networks, Advanced Digital Signal Processing,
   Digital Image processing, Statistical Signal Analysis, Embedded Systems.

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**

### Journals

- 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.

#### Conference

1. P. Sneha Latha, Pawan Kumar, S. Y. Kahu, K. M. Bhurchandi, "Segmentation of color images using genetic algorithm with image histogram," *Proc. SPIE 9445*, 7th International Conference on Machine Vision 2014, Milano, Italy.

#### Poster Presentation

1. S. Y. Kahu, R. Rahate, K. M. Bhurchandi, "An improved JPEG image compression algorithm," 16th Irish Machine Vision and Image Processing Conference 2014, Northern Ireland, UK.

## PROFESSIONAL EXPERIENCE

## Associate SQA Engineer

2011-2012

Marvell India Pvt. Ltd., Pune, India

Pre-certification testing of Wi-Fi devices and access points.

## Research and Teaching Assistant

2014-2018

Department of Electronics and Communication Engineering,

Visesvaraya National Institute of Technology, Nagpur, India

Assist in teaching and grading for a class and execute tasks related to academic research.

## **SKILLS**

Programming Languages Matlab, C, Java

Softwares JM reference software for H.264

## **REFERENCES**

Available upon request