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# DEEPAK K. PRADHAN

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## EXPERIENCE

<b>Software Engineer</b>	<b>Arkray Healthcare Pvt. Ltd. - R&amp;D</b>	<b>May 2018 – Present</b>
• Working in the domain of Medical Image Analysis, Bio-Informatics & Deep Learning.		
<b>Software Engineer</b>	<b>Blinkware Technology Sdn. Bhd. - R&amp;D (Malaysia)</b>	<b>Jan 2018 – April 2018</b>
• Worked in the domain of Computer Vision and Deep Learning.		
<b>Visiting Research Scholar</b>	<b>Indian Institute of Technology (IIT) Mandi</b>	<b>May 2017 - July 2017</b>
• Developed semantic feature vector for scene images using deep learning techniques.		
<b>Summer Intern</b>	<b>IIT Mandi</b>	<b>May 2016 - July 2016</b>
• Deployed Deep Neural Networks and evaluated them using artificial and real world data.		
<b>Teaching Assistant</b>	<b>National Institute of Technology (NIT) Goa</b>	<b>Aug 2015 - July 2017</b>
• Mentored students for C-Programming Lab, Pattern Recognition & Neural Networks.		

## PROJECTS

- **Urine Sediment Analysis:** A deep learning based microscopic urine sediment recognizer.
- **SMN representation for Scene Images using Pseudo-concepts & ConceptNN** (2017). A Semantic multinomial representation for scene images has been developed with *the pseudo-concepts* from *deep CNNs* and *Concept neural network*. (Used **Python, Matlab, Scikit learn, Numpy, Tenserflow, Caffe**.)
- **Pattern Classification** (2016). Different patterns of signals are classified using *machine-learning techniques* like *Bayesian classifiers, GMMs, SVMs and Neural networks*. (Used **Matlab, Python, Matplotlib, SVM Torch**)
- **Odia Language Stemmer.** A stemmer for Odia language. It finds the stem word for every word in Odia, which plays key role in indexing of the all-corresponding inflections of the stem word. (Used **Java, MySQL**.)

## PROFESSIONAL SKILLS

- **Languages:** Matlab, Python, R, C/C++ **Concepts:** Deep Learning, Machine Learning, Computer Vision, NLP

## EDUCATION

M.Tech	Computer Science & Engineering	National Institute of Technology Goa
B. Tech	Computer Science & Engineering	ITER, Siksha 'O' Anusandhan University

## ACHIEVEMENTS AND AWARDS

- **Vice President:** NIT Goa Toastmasters Club
- **Member of Organizing Committee:** Technical Festival, NITGoa
- **Rajyapuraskar:** Awarded for the pursuit of service to mankind as a Scout

## INTERNATIONAL TRAVELS

- Business Trip to Japan
- MICCAI Conference to China

## INVITED TALKS / WORKSHOPS

- “Machine Intelligence and learning with Anaconda and Python” at Govt. Engg. College Jhalawar, Rajasthan during 27<sup>th</sup>– 28<sup>th</sup> April 2018
- “Introduction to Machine Learning and Computer Vision” at DBATU, Lonere, Maharashtra on 2<sup>nd</sup> Aug 2019
- “Artificial Neural Networks and it’s application for Machine Learning” at VSSUT, Burla, Odisha during 16<sup>th</sup>-17<sup>th</sup> Nov 2019

## PATENT

- *Method and System for Image Enhancement of Microscopic image.* Application No: JP2019-30720 (\*Filed)

## PUBLICATIONS

- *MicroGAN: Size-invariant Learning of GAN for Super-Resolution of Microscopic Images* (with Srishti Gautam, Prakash Chhipa & Nakajima Shinya) published in **COMPAY, MICCAI - 2019**, Shenzhen-China. (Springer)
- *Deep Spatial Pyramid Match Kernel for Scene Classification* (with Shikha Gupta, Veena T. & Dileep A. D.) published in **ICPRAM - 2018**, Portugal. (SCITE Press)
- *Semantic Multinomial Representation for Scene Images using CNN-based Pseudo-concepts and Concept Neural Network* (with Shikha Gupta, Veena T. & Dileep A. D.) published in **NCVPRIPG - 2017**, India. (Springer)

## PROFESSIONAL MEMBERSHIPS

Association of Computer Machinery (ACM)

International Association of Engineers (IAENG)