

Education	Netaji Subhas Institute of Technology, University of Delhi <i>B. E. in Information Technology</i> First Class with Distinction (CGPA: 8.26)	Aug 2013 - May 2017
Employment	Paralleldots, Inc. <i>Senior Data Scientist</i> <i>Data Scientist</i> <i>Data Science Intern</i> Developing machine learning and deep learning models in multiple domains like NLP, computer vision and speech recognition and applying them in sectors of market research and healthcare. Indraprastha Institute of Information Technology <i>Research Associate</i> Exploring computational models to segment brain MRI and detecting bone marrow cancer (Myeloma) from microscopic images of white blood cells. (With Dr Anubha Gupta)	Nov 2018 - Jun 2017 - Oct 2018 Jun 2015 - Jun 2017 May 2017 -
Conference Papers	U-Segnet: Fully convolutional neural network based automated brain tissue segmentation tool <i>P. Kumar, P. Nagar, C. Arora, A. Gupta</i> <i>International Conference on Image Processing (ICIP), 2018</i> Boosted Cascaded Convnets for Multi-label Classification of Thoracic Diseases <i>P. Kumar*, M. Grewal*, M.M. Srivastava</i> <i>International Conference Image Analysis and Recognition (ICIAR), 2018</i> RADnet: Radiologist level accuracy using deep learning for haemorrhage detection in CT scans <i>M. Grewal, M.M. Srivastava, P. Kumar*, S. Varadarajan*</i> <i>International Symposium of Biomedical Imaging (ISBI), 2018</i> Anatomical labeling of brain CT scan using multi-context nearest neighbor relation networks <i>S. Varadarajan, M.M. Srivastava, M. Grewal*, P. Kumar*</i> <i>Poster in International Symposium of Biomedical Imaging (ISBI), 2018</i> A Big Data Analysis Framework Using Apache Spark and Deep Learning <i>A. Gupta, H. Thakur, R. Shrivastava, P. Kumar, S. Nag</i> <i>International Conference of Data Mining (ICDM) workshop on DSDBA , 2017</i>	
Preprints	LeukoNet: DCT-based CNN architecture for classification of normal vs Leukemic blasts in B-ALL Cancer <i>S. Mourya*, S. Kant*, P. Kumar*, A. Gupta, R. Gupta</i> <i>Under review</i>	
Additional Projects	LeukoGAN: A dual representative adversarial network for cancer cell nuclei classification Experimenting with bio-inspired GAN to generate synthetic images of cells to improve classification. Keyword spotting and speaker diarization in active speech conversation Using prototypes of keywords and speakers from prototypical networks for their detection in audio. Deduplication of large image dataset Caught duplicate images by detecting key points and pair-wise matching them by extracting the point's descriptors from a pre-trained network. SmartGaze: Analysing eye tracking videos to detect hotspots. Used patch based template matching technique to gather insights as to where a user tends to focus while shopping in a retail store and in a mobile application. Detection of Tooth Caries from Bitewing Radiographs Experimented with LSTM based approach to detect dental caries from an X-Ray. Skin Lesion Analysis towards Melanoma Detection Tested out various architectures using CNNs and autoencoders to detect skin cancer (Melanoma) from microscopic images. Machine Learning Classifier for App User's Intent and News headlines Used machine learning tools like XGBoost and SVMs with statistical methods to classify user reviews and news headlines.	

