

SAMIDHA MRIDUL VERMA

Student

@ samidha1705@gmail.com

+918696438363

in linkedin.com/in/samidhaverma/

📍 Mumbai, India

EXPERIENCE

Student Research Assistant

Department of Science and Technology, Rajasthan

📅 Oct 2017 – May 2018 📍 Jaipur, India

- Used machine learning, probabilistic models and mathematical transformations for wind power short term forecasting in wind farms in the state of Rajasthan. (Certificate)

PROJECTS

Classification of basic hand gestures based on sEMG signals

📅 Dec 2018 – Current 📍 RAMAN Lab, MNIT

- Devised a new hybrid approach using wavelet transformation, ensemble empirical mode decomposition and ensemble decision tree classifiers to classify EMG signals. Journal paper in review.

Object Detection in Optical Remote Sensing Images Based on Weakly Supervised Learning and High-Level Feature Learning

📅 Aug 2018 – Nov 2018 📍 MNIT

- Implemented a geospatial object detection framework by combining weakly supervised learning and high-level feature learning. Deep Boltzmann Machine is adopted to extract high-level features.

Fault Diagnosis in Electric Drives

📅 Feb 2018 – Apr 2018 📍 MNIT

- Trained Fault Diagnosis Neural Network (FDNN) using data generated on different fault simulations followed by multi-class classification of the faults.

Brain Tumor Classification in MRI Images using Convolutional Neural Networks

📅 Feb 2018 – Apr 2018 📍 MNIT

- Used Convolutional Neural Networks (CNNs) to classify brain tumor MRI images into 5 categories using BRATS dataset 2013.

TECHNICAL SKILLS

C/C++, Python, MATLAB, R, Assembly
SKlearn, Numpy, Tensorflow, Keras, Simulink
Git, \LaTeX , LINUX

INDEPENDENT COURSEWORK

Neural Networks and Deep Learning by deeplearning.ai (Certificate)

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization by deeplearning.ai (Certificate)

EDUCATION

Bachelors of Technology (Electrical Engineering)

Malaviya National Institute of Technology (MNIT)

📅 (exp.) May 2019 📍 Jaipur, India

- CGPA: 6.3/10

AISSCE (CLASS XII)

Apeejay School Kharghar

📅 2015 📍 Navi Mumbai, India

- 92.6%

CLASS X

Apeejay School Kharghar

📅 2013 📍 Navi Mumbai, India

- CGPA: 10/10

PUBLICATIONS

- Vasanth Reddy, Samidha Mridul Verma, Kusum Verma, and Rajesh Kumar. "Hybrid Approach for Short Term Wind Power Forecasting." 9th International Conference on Computing, Communication and Networking Technologies (ICCCNT - 2018). IEEE. Indian Institute of Science (IISc), Bengaluru, 10-12 July, 2018
- Samidha Mridul Verma, Vasanth Reddy, Kusum Verma, Rajesh Kumar. "Markov Models based Short Term Forecasting of Wind Speed for Estimating Day-Ahead Wind Power." IEEE International Conference on Power, Energy, Control Transmission Systems 2018, (ICPECTS - 2018), Chennai, 22-23 Feb. 2018.

BACHELOR THESIS

Abnormality Detection in Musculoskeletal Radiographs

📅 Dec 2018 – Current 📍 MNIT

- Improvements on deep learning frameworks for detection of abnormality in Musculoskeletal Radiographs. NASnet, Xception V2 and other networks have been studied for this problem statement yet.

CLUBS

- Zine - Robotics and Research
- IEEE Student Chapter, MNIT