SAMIDHA MRIDUL VERMA

Software Development Engineer

@ samidha1705@gmail.com +91-7021097597 in samidhaverma Bengaluru, India

EXPERIENCE

Software Engineer

Societe Generale Global Solution Centre

Aug 2019 - Present Bengaluru, India

- Working as a software development engineer in front-end and back-end development team for SocGen-based InfoArchive called SCAD. Developed a web application to create a dashboard of real-time packages sent and received in the application using ReactJS, PostgreSQL and ELK.

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.

TECHNICAL SKILLS

C/C++, Python, MATLAB, Javascript, SQL
ReactJS, SKlearn, Numpy, Tensorflow, Simulink
Git, LaTeX, Linux

INDEPENDENT COURSEWORK

Neural Networks and Deep Learning by deeplearning.ai *(Certificate)*
Improving Deep Neural Networks: Hyperparametertuning, Regularization and Optimization by deeplearning.ai *(Certificate)*

EDUCATION

Bachelors of Technology (Electrical Engineering)

Malaviya National Institute of Technology (MNIT), Jaipur

2015 - 2019 Jaipur, India

BACHELOR THESIS

Classification and Localisation of Abnormality in Musculoskeletal Radiographs

Dec 2018–May 2019 MNIT

- Improvements on deep learning frameworks for detection of abnormality in Musculoskeletal Radiographs. NASnet, Inception V3, MobileNet, ResNet and other networks have been implemented and comparisons have been done. The abnormality has also been localised using Class Activation Maps.
Received 10/10 grade - top 1 percentile.

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.*

CLUBS

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