

SAMIDHA MRIDUL VERMA

Software Development Engineer

@ samidha1705@gmail.com

@samidhaVerma

in samidhaverma

📍 Bengaluru, India

EXPERIENCE

Amazon

Software Development Engineer I

📅 July 2021 - Present 📍 Bengaluru, India

- Maintaining team-owned pipelines for the App Submission team, coordinating with different teams to ensure smooth flow for app processing that helps developers submit and publish their apps on the Amazon Appstore.
- Designed and implemented solutions to monitor and rectify app submission issues in the current system.
- Involved with working on AWS technologies like Serverless, CloudFormation, Elastic Beanstalk, etc.
- Creating and maintaining RESTful APIs/microservices along with writing unit and automation tests using JUnit.

Societe Generale

Software Engineer

📅 Aug 2019 - Jun 2021 📍 Bengaluru, India

- Developed a GUI for a customised archiving application in an Agile environment using React and Typescript. Integrated RESTful APIs with the application for user authentication and authorization, dynamic form generation and search operations.
- Used React, PostgreSQL and ELK to create a dashboard of real-time packages sent and received which interacts with the archiving application.

PROJECTS

Trajectory Tracking based on Adaptive Weights Receding Horizon Control by Differential Drive Robot

📅 Apr 2020 - Sept 2020 📍 MNIT Jaipur, India

- This new approach reduces perturbations which results in quicker path following with lower path transverse at the cost of negligible increase in computation time.

Classification of basic hand gestures based on sEMG signals

📅 Dec 2018 - May 2019 📍 RAMAN Lab, MNIT Jaipur

- Devised a new hybrid approach using wavelet transformation, ensemble empirical mode decomposition and ensemble decision tree classifiers to classify EMG signals. 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 Jaipur, India

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

TECHNICAL SKILLS

Strong: AWS, SQL, React, Javascript, Typescript, Git, Java, HTML/CSS

Familiar: React Redux, Node.js, C/C++, Python

Beginner: ELK, MATLAB, L^AT_EX

EDUCATION

Bachelor 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

- Implemented and compared deep learning frameworks for detection of abnormality in Musculoskeletal Radiographs using NASnet, Inception V3, MobileNet, ResNet and other networks. Localised abnormalities by generating heat maps using Class Activation Maps.

PUBLICATIONS

- Samidha Mridul Verma, Rahul Ravichandran, Rahul Singhal and Rajesh Kumar. "Trajectory Tracking based on Adaptive Weights Receding Horizon Control by Differential Drive Robot" 59th Annual Conference of the Society of Instrument and Control Engineers of Japan (SICE). Chiang Mai, Thailand, 23-26 Sept, 2020
- 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

HOBBIES

- Indian classical dance - Bharatanatyam
- Writing