Basavraj Chinagundi

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EDUCATION

Thapar University   **Patiala, India**
BE Electronics and Communication Engineering | CGPA: 8..0   *Expected Graduation: June 2023*
Organization: Google DSC member

Delhi Public School   **Patiala, India**
Scholar | Head Boy | Computer Club Lead   *April 2019*
XII GPA: 9.5/10 | X GPA: 10/10

RESEARCH EXPERIENCE

sEMG muscle activity (*Present*)
- Implementing Signal processing techniques (rfft, filters, envelopes)
- Building an application for real time analysis and classification of body movements.
- Time series forecasting using LSTM's

Lithium -ion battery strength (*Present*)
- Prophet and ARIMA model building for prediction of battery drainage.
- Optimization of voltage consumption by efficient battery modeling.
- Kalman filters for SOC estimation

Compressive strength analysis (*Present*)
- Ensemble modeling to boost accuracy .
- Synthetic tabular data generation using CTGAN to increase samples for training and testing
- Improving data quality with anomaly detection and removal techniques.

Pugmark Classifcation (*Present*)
- Image annotation for computer vision
- Real time instance segmentation using YOLACT, Mask RCNN

Renal transplant (*Present*)
- Forecasting patient reports after transplantation
- Finding feature importance for determination of patient's health condition.

Quantum resistant codes (*Present*)
- Code encryption using lattice based cryptography
- Developing quantum attack proof system

PROJECTS

muZip App
(HTML5,CSS3,Python,Flask,PyTube)
Web application to simply download your favourite artist's music any song or album in just one click.

Piccauto App
(HTML5,CSS3,Python,Flask,Google Images Search and custom search engine, YOLO)
Deep learning based image downloader for any search query

ACHIVEMENT

Inter DPS National Computer Science Festival
Secured **1st** position among 45 schools from all over the for creating a website based on Digital India initiative.

TECHNICAL

Languages: HTML5,CSS3,JavaScript, C++, Python
Frameworks: TensorFlow2, NodeJS , Flask
Utilities: Git, OpenCV, Adobe Premiere Pro
Interests: Machine Learning ,Deep Learning,Web Dev, IoT ,Robotics