Shyamal Krishna Agrawal

shyamal19101@iiitnr.edu.in | 7974594740 | GitHub | LinkedIn | Medium

Education

B.Tech in ECE	IIIT Naya Raipur (2019 - 2023)	8.68 CGPA
AISSCE	DAV Public School, SECL, Korba	86%
SSC	DAV Public School, SECL, Korba	9.2 CGPA

Experience

Data Science Intern, AITS Software Pvt. Ltd.

- Created new deep learning models and optimized them for resource utilization
- Worked on AITS proprietary deepSea framework to add more ML operators

Data Science Intern, Iha Consulting Services Pvt. Ltd

- Ideated a methodology to identify diseases in crops from images
- Executed project to detect harmful content in products

Data Science & Business Analytics Intern, Grip at The Spark Foundation [GitHub]

- Work on assign dataset to analyse them give trend or useful information
- Explain how the analysis is done through a proper video

Projects

1. Oral cancer prediction :- Created a dataset of oral cancer and made a deep learning based ensemble model to classify whether oral cancer present or not and if present what is the stage of the oral cancer.
2. Radio link failure prediction :- Using machine learning and deep learning and taking weather conditions as features from the best weather station predict when radio link failure will occur and how it can be prevented.
3. Blood pressure estimation using PPG signal :- Using the PPG waveform, 21 features are extracted, and after analyzing them and using only 4, temporal features predicted SBP, DBP, MAP with small mean absolute error and high accuracy.
4. Health Monitoring For Diesel Engines By Data-Driven Methods :- After applying the AWGN process to the signal obtained from sensors, the data is stored, and then using that data presence of multiple types of errors and severity of each error is predicted with high precision and recall values.
5. Crop recommendation and disease detection :- Crop recommendation system on the basis of ph, temperature, rainfall, etc., and plant diseases classification on the basis of the image of the plant.
6. Detection of harmful contents in products (via label scanning) :- Manual curation of data set, including constituents of products available in the Indian market. Cleaning, classifying and analyzing datasets using various data analysis techniques. Creating a model based on algorithms of OCR with the help of python programming languages.

Skills

Languages: C, C++, PYTHON, JAVA, Matlab
Databases: MySQL, SQL
Website development: HTML5, CSS, Bootstrap, mongodb, nodejs
Data Analysis: Python, Numpy, Pandas, Matplotlib, Seaborn, Hadoop
Machine Learning Algorithms: Regression and classification
Deep learning Algorithms: ANN, CNN, RNN
Softwares: Visual Studio, Anaconda, MATLAB, Vivado, Orcad PsPice
Operating Systems: Windows, Linux

Accomplishments

- Kaggle notebook expert
- Competitive coder on Codechef and Codeforces
- 5 Star coder of Hacker rank in C, Python, Java,10 days of Javascript, 10 days of statistics, 30 days of code, Problem Solving
- National Science Talent Search Examination 2018 State Rank - 3, National Rank - 315
- International Mathematics Olympiad 2018 State Rank - 1, Olympiad Rank - 39
- International Science Olympiad 2018 State Rank - 8, Olympiad Rank - 182