

Sagar Potdar

<http://www.linkedin.com/in/worksagarpotdar>

Email : worksagarpotdar@gmail.com

Mobile : +91-7000857217

Location : Pune, Maharashtra

EDUCATION

- **National Institute of Technology (NIT)** Andhra Pradesh
Master of Technology in Computer Science and Data Analytics *Sept. 2020 – Sept. 2022*
- **Shri Shankaracharya Group of Institutions** Bhilai, CG
Bachelor of Engineering in Information Technology *Aug. 2013 – June. 2017*

EXPERIENCES

- **Persistent Systems** Pune, MH
Project Trainee *June 2019 - June 2020*
 - Worked on Projects Centralized to IoT devices. Created and demonstrated an Autonomous Warehouse scenario using a Turtle bot robot and Drone. Coordinate all technical and development issues identified during the process with the team of engineers to formulate and initiate appropriate courses of action to ensure the timely completion of the version upgrade.
 - Implemented mapping and path-finding using Visual SLAM algorithm for turtle-bot Robot. Prepared an autonomous warehouse application that used Dijkstra's algorithm for the purpose of the shortest path based on Mapping and Localization in the designed positioning system. Improved the efficiency of the sensor data and general robot operating system by analyzing it and drawing suitable conclusions.
 - Stimulated autonomous driving and inventory tracking using a drone. The drone follows its path autonomously, adjusts its position by using an AR marker and scanning the Barcode ID, checks the information in the master database, and keeps track of data in the database.
- **TossCall Services Pvt Ltd** Bhilai, CG
Software Engineer *Jan 2018 - May 2019*
 - Responsible for developing and maintaining software applications using Python and SQL. Engaged with clients to comprehend their requirements and provided technical solutions that fulfilled their needs.
 - Collaborated with other teams on work issues to ensure problem-free and timely feature implementation.
 - Involved in the full software development life-cycle, from design and development to testing and deployment.
 - Contributed to Agile development through story planning and tracking through Jira and got hands-on experience with Git/GitHub repositories.

SKILLS SUMMARY

- **Skills:** Python(Programming Language), SQL, Deep Learning, Machine learning, Computer Vision, Image Processing, Object Detection, Robot Operating System(ROS-2)
- **Libraries:** Pandas, Numpy, Sci-kit Learn, TensorFlow, Keras
- **Visualization:** Power BI, Tableau, Advanced Excel

PROJECT EXPERIENCE

- **Project 1 - Product & Sales Analysis[Power BI,Python]:**
 - * Analysis of data is the goal in order to understand sales and product performance. Classified a product's performance and created a Power-BI dashboard to learn about its advantages, disadvantages, and areas for development.
 - * Ensured consistency and completeness by pre-processing the data using exploratory data analysis (EDA). In order to do this, many strategies must be used, including methods for managing missing information, eliminating duplicate entries, and standardizing product-client details.

- * Assessed pricing strategies and the impact of pricing on product performance. This includes techniques such as price analysis, demand forecasting, and Segmenting customers based on their preferences, needs, and demographics to better understand their product choices.
- **Project 2 - T-20 Match Analysis & Score Prediction[Machine Learning, PowerBI]:**
 - * Predict the score of World T20 matches using a machine learning algorithm and Visualize the data into Power BI Report to identify the Top 11 players for the team.
 - * The Scikit-Learn pipeline was used to make the code reusable. After evaluating several regression techniques, the XgBoost Regressor was trained on the specified features. The model was tested in terms of the R2 score on the test data set. The model worked really well with just a little hyperparameter modification, yielding an R2 score of 0.946 and a Mean Absolute Error of 1.67.
 - * Created a Power BI report identifying the top 11 players for a T20 cricket team by cleaning and transforming the data with pandas, and evaluating various player performance metrics.
- **Project 3 - Leaf Disease Detection[Deep Learning]:**
 - * Developed a Deep Learning model that can detect diseases from the cassava leaf and give a smooth experience to the farmers who cultivate cassava in large amounts.
 - * Analyzed dataset and performed exploratory data analysis and data visualization to find relationships and hidden parameters for the detection task. Several Pre-processing like Data augmentations, crop, rotation, flip, and many more are being used with dataset images.
 - * Implemented and trained computer vision models for disease detection have achieved 92% recall and 79% precision. Cross-Validation is used for Training with different epochs. Compared performances by employing different models and carried out with transfer learning for disease detection and image classification.
- **Project 4 - Cetaceans Classification & Identification[Deep Learning & Machine Learning]:**
 - * Created an ensemble classifier model with deep metric learning and different Loss functions in a dual-head approach for the classification of Water Mammals.
 - * Performed data exploration, cleaning, modeling, and hyper-parameter tuning to optimize the accuracy and loss in the training procedure.
 - * Deployed Deep learning and computer vision Model to solve complex dataset image patterns and features. Several state-of-the-art models were used for the purpose. Performed statistical analysis and fine-tuning using test results, Train the model to extend existing ML libraries and frameworks. The developed Deep Learning model achieved Top 5 accuracy with 84% confidence.

CERTIFICATES

- NPTEL - Scalable Data Science
- NPTEL - Deep Learning
- NPTEL - User Centric Computing for HCI
- IBM - Data Science Foundations
- CISCO - Introduction to IOT
- Cognitive Class - Python for Data Science
- Cognitive Class - SQL and Relational DBs

ACHIEVEMENTS

- Qualified GATE exam Twice
- Successfully completed Google Fundamentals of Digital Marketing Certificate
- Successfully completed EC-Council CSCU Certificate (Certified Secure Computer User)
- Portfolio - <https://sites.google.com/view/sagarpotdar/home>
- Github - <https://github.com/sagarpotdar>