


CONTACT ON

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MANE PRADIP N.

Data Scientist



LinkedIn



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EDUCATION

1. Master of Technology (M.Tech.)

Electronics Systems & Communication
Government College of Engineering,
Amravati, Maharashtra.
2016

2. Bachelors in Engineering (B.E.)

Electronics
Shivaji University,
Kolhapur, Maharashtra
2013

CERTIFICATIONS

1. Master's Program - Data Scientist: Simplilearn Certified in collaboration with IBM – 2022

- Data Science with Python, R
- SQL training
- Advanced Machine Learning
- Deep Learning with Keras & TensorFlow
- Tableau Desktop 10
- Data Science Capstone

2. Python and Flask Framework Complete Course: Udemy (2023)

3. Certificate of Data Science Module Training: UV Technocrats (2018)

TECHNICAL SKILLS

- Python (NumPy, Pandas, SciPy, Matplotlib)
- SQL (MySQL), R, HTML(Basics)
- Flask Framework
- IDE's (Jupyter, PyCharm, VSC, MATLAB)
- Machine Learning (Scikit-learn)
- Deep Learning (Keras and TensorFlow)
- GenAI, LLM's
- Data Visualization (Tableau, Seaborn)
- Data Analysis
- Data Preparation
- Pattern Recognition
- Time Series Forecasting
- Natural Language Processing (NLP)
- Statistical Analysis
- Mathematics & Probability

CAREER OBJECTIVE

Have gained good exposure to understand various aspects of **Data Science** through Master's Program which has developed a great sense of confidence at a very personal level. Hence, I seek a challenging position in the area of **Data Science, Machine Learning, Data Analysis & related fields** where I can share my skills and expand my capabilities further in the pursuit of progressive career advancement.

PROJECTS HIGHLIGHTS

Project: Classification of Heart Sound using machine learning techniques

Duration: 1.5 Years

Technologies Used: Python, Zargis Steth Assist Software, Flask, Visual Studio Coder, GitHub, Littman Electronic Stethoscope, Raspberry pi

Roles and Responsibility:

- Gathered and Pre-processed data using Littman Electronic Stethoscope from Sassoon Hospital, Pune.
- Extracted 28 Features from Collected data (1.5GB, [.wav] format) using Python libraries like Librosa and ThinkDSP, Pandas, Numpy
- Build models using SVM, Decision Tree, Random Forest and K-NN algorithms
- Deployed SVM (Accuracy=94%, Precision=90%) model on AWS Elastic beanstalk

Project: Cuffless Blood Pressure Prediction using Machine Learning Techniques (Time series forecasting)

Duration: 1.5 Years

Technologies Used: Time series forecasting, Python, MS Excel, Flask, Visual Studio Coder, GitHub, CONTECH CMS 8000 Patient Monitor,

Roles and Responsibility:

- Gathered the Real-time PPG data using CONTECH CMS 8000 patient monitor from A team of 43 healthy volunteers including both males and females.
- Data (13920 Samples) pre-processed and Extracted 15 features using python
- Build models using Linear and Non-Linear regression algorithms
- Deployed Non-Linear regression model on AWS Elastic beanstalk

Project: Fault detection and identification of vehicle starters using machine learning techniques:

Duration: 1 Years

Technologies Used: Python, Jupyter Notebook, Visual Studio Coder

Roles and Responsibility:

- Compiled and filtered 700k rows of data which was sent by a client.
- Optimized and pre-processed data before building a classification model
- Performed Feature Engineering on data having 43 columns using python libraries
- Build the model on Logistic Regression, Naïve Bayes & Random Forest Classifier
- Analyzed Model Accuracy, Precision and Recall using Classification Report

EXPERIENCE

April 2020 - Current

Data Scientist: Quest Integrity Services | Pune

- Actively involved in daily standup calls and task assign
- Compiled, cleaned and manipulated data for proper handling.
- Deployed models using ML/DL algorithms to drive business decisions.
- Worked with stakeholders to develop roadmaps based on impact, effort and test coordination.

PUBLICATIONS

1. "Machine Learning Approach for Prediction of Aortic and Mitral Regurgitation based on Phonocardiogram Signal". (IEEE, India, 2021). [📄]
2. "Machine Learning Based Heart Sound Classification using Hilbert Transform Envelope Technique". (Springer, London, UK, Feb 2020). [📄]
3. "Machine Learning Approach towards Continuous Cuffless Blood Pressure Monitoring Based on PPG Technique". (IEEE, Under Review) [📄]
4. "Post-correction of Analog-To-Digital Converter with Real-time FPGA Implementation: A Review " (IJIERE, ICSTSD 2016). [📄]
5. "Digital Post-Correction of Analog-To-Digital Converter". (IRF International Conference, 2016, Pune, India.) [📄]

ACHIEVEMENTS

- Stood 1st Rank in M.Tech.
- UGC NET Qualified
- Gate Qualified
- Winner in University level CHESS Competition
- Awarded as BEST PLAYER in KABADDI.

ADDITIONAL INFORMATION

1. SOFT SKILLS:

- Critical thinking
- Research
- Effective communication
- Proactive problem solving
- Intellectual curiosity
- Time-Management

2. LANGUAGES:

- English
- Hindi
- Marathi

3. INTERESTS:

- Indoor and Outdoor Sports
- Movies & Web Series
- Music
- Trekking & Traveling

September 2018 - March 2020

Research Associate: College of Engineering Pune | Pune

- Gathered, arranged & corrected the data to facilitate Research Objectives.
- Devised and deployed predictive models using ML/DL algorithms
- Wrote research papers, reports and reviews regarding projects.
- Contributed to and actively participated in research conception, design and execution to address defined problems.

January 2018 - May 2018

Assistant Professor: Veermata Jijabai Technological Institute | Mumbai
Roles and Responsibility:

- Performed Teaching and Lab work under the guidance of The Head of Department.
- Conducted research to serve as the basis for academic publication writing.
- Created materials and exercises to illustrate the application of concepts.

MASTER'S PROGRAM - DATA SCIENTIST: PROJECTS

Capstone Projects

Project 1. Case Study - Real Estate

Problem Statement: A banking institution requires actionable insights from the perspective of Mortgage-Backed Securities, Geographic Business Investment and Real Estate Analysis.

- Identified white spaces/potential business in the mortgage loan and also Identified potential monthly mortgage expenses for each region
- Created a statistical model to predict the potential demand in dollars amount of loans for each of the regions in the USA.
- Created a dashboard that would refresh periodically post data retrieval from the agencies.

Project 2. Case Study – Healthcare Industry

Problem Statement: Build a model to accurately predict whether the patients in the dataset have diabetes or not.

- Applied and compare different classification algorithms to build a model
- Created a classification report by analyzing sensitivity, specificity, AUC(ROC-curve)
- Created a dashboard in the tableau by choosing appropriate chart types and metrics useful for the business

Project 3. Case Study – Retail

Problem Statement: It is a business-critical requirement to understand the value derived from a customer. RFM is a method used for analyzing customer value.

- Performed a preliminary data inspection and Data cleaning
- Build a RFM model – Recency Frequency and Monetary based on their behavior.
- Created clusters using the k means clustering algorithm
- Created a dashboard in the tableau by choosing appropriate chart types and metrics useful for the business

Course Projects

Machine Learning Projects:

- **Income Qualification:** Performed data wrangling, Performed Feature Engineering and Using Random Forest Classifier predicted test data with an accuracy of 90%.
- **Predicting Heart Disease:** Performed data wrangling, Performed EDA and Develop different classification algorithms to classify whether a patient is diagnosed with heart disease or not. random forest model gives good results (Acc.=80% & Precision=88%)

Deep learning Projects:

- **Lending Club Loan Data Analysis:** Performed data preprocessing and build a deep learning model to predict the chance of default for future loans with 91% of precision
- **Image Classification Model Using CNN:** Build a CNN model that classifies the given pet images correctly into dog and cat images