Mayur Shende

mayur.k.shende@gmail.com
+91-8668955880
0000-0002-1738-2573
linkedin.com/in/mayur1009
github.com/Mayur1009
gitlab.com/Mayur1009

EDUCATION

M.Tech Computer Science and Engineering - 7.75/10.00

2021-present
Specialization: Artificial Intelligence
Institute: Defence Institute of Advanced Technology, Pune, India
Thesis: TBD

B.E Computer Science and Engineering - 9.28/10.00

2017-2021
Institute: Goverment College of Engineering, Nagpur
Thesis: Development of an R library for Automated Time-series Cleaning

SKILLS

Python R C++ C LaTex HTML CSS Flutter

EXPERIENCE

Summer Internship - VNIT, Nagpur

May 2019 - August 2019
Implemented PSF(Pattern Sequence Based Forecasting) Forecasting Algorithm, for univariate time-series forecasting, in Python (https://pypi.org/project/PSF-Py/). Also worked with tools for data visualization.
Python Matplotlib Forecasting ARIMA Prophet

Google Summer of Code (2021)

May 2021 - August 2021
Project link: https://summerofcode.withgoogle.com/archive/2021/projects/5676749848838144
The goal of this project was to develop a new R package, named *cleanTS* (https://cran.r-project.org/web/packages/cleanTS/index.html). The package automates the proces of cleaning uniariate time-series data and provides new ways to visualize data in different resolutions.
Data Cleaning Univariate Time-Series R Shiny Animated Visualizations

Winter Internship - VNIT, Nagpur

April 2020 - August 2020
Worked on a implementation of Jaya, an optimization algorithm. An R package for the same was also published (https://cran.rstudio.com/web/packages/Jaya/index.html). Also, worked in the fields of data visualization, forecasting, and image processing and various tools for data manipulation in R.
R GA Data Visualization Optimization Algorithms

Google Summer of Code (2022)

May 2022 - November 2022
Project link: https://summerofcode.withgoogle.com/programs/2022/projects/0WjqfO7k
The goal of the project is to develop a new R package, modifying the imputeTestbench package (data imputation) for Genomics applications with better computational capabilities.
Data Imputation Genomics R Shiny

PUBLICATIONS

- **Mayur Kishor Shende**, Andrés E. Feijóo-Lorenzo, Neeraj Dhanraj Bokde. **cleanTS: Automated (AutoML) tool to clean univariate time series at microscales**. *Elsevier.* ***Neurocomputing*** Volume 500, Pages 155-176 (2022). (IF 5.719) Accepted. (https://doi.org/10.1016/j.neucom.2022.05.057).

- **Shende M.**, Salih S., Bokde N., Scholz M., Oudah A., Yaseen Z. (2022).**Natural Time Series Parameters Forecasting: Validation of Pattern Sequence-based Forecasting (PSF) Algorithm: A New Python Package**. *Multidisciplinary Digital Publishing Institute (MDPI). **Applied Sciences*** (IF 2.736). Accepted.
- M Sawant, **MK Shende**, AE Feijóo-Lorenzo, ND Bokde. **The State-of-the-Art Progress in Cloud Detection, Identification, and Tracking Approaches: A Systematic Review**. *Multidisciplinary Digital Publishing Institute (MDPI). **Energies*** Volume 14 Issue 23. (2021) (IF 3.004) Accepted. (https://www.mdpi.com/1996-1073/14/23/8119/pdf).
- Agenis-Nevers M., Bokde N., Yaseen Z., and **Shende M.**(2020). **An empirical estimation for time and memory algorithm complexities: Newly developed R package**. *Multimedia Tools and Application* (IF 2.757). Accepted. (https://arxiv.org/abs/1911.01420).

PROJECTS

- Development of an R Package for automated time-series cleaning. (github.com/Mayur1009/cleanTS).
- Implementation of an optimization algorithm JAYA in R. (https://cran.rstudio.com/web/packages/Jaya/index.html).
- Created Python Package implementing PSF(Pattern Sequence Based Forecasting) algorithm. (https://pypi.org/project/PSF-Py/).
- Contribution in data visualization in the R package forecastTB.
- Created a Flutter application for detection of crops from given image.
- Project to implement an algorithm that detects clouds from satellite images. This was part of problem statement given by ISRO in Smart India Hackathon, 2019.

CERTIFICATIONS

∞ Machine Learning
- By Stanford University on Coursera
- Logistic Regression
- Machine Learning Algorithms

∞ Deep Learning Specialization
- By deeplearning.ai on Coursera
- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks(Ongoing)
- Sequence Models(Ongoing)

∞ Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
- By deeplearning.ai on Coursera.
- Introduction to Neural networks.
- Implementing various networks using Tensorflow.

ACTIVITIES AND INTERESTS

Team Leader, Smart India Hackathon 2019
- Qualified and selected from the college round.
- Problem Statement: Cloud Movement Prediction

Event Organizer, SYNERGY, GCOEN, 2019
- Inter College technical event "SYNERGY"
- Part of the organizing team for gaming events in Synergy, 2019.

REFEREE

Dr. NEERAJ BOKDE
- Assitant Professor, Center for Quantitative Genetics and Genomics, Aarhus University, Aarhus, Denmark
- Email: neerajdhanraj@qgg.au.dk
- Website: https://www.neerajbokde.in/