BHUSHAN SANJAY ZADE

PUNE INDIA | 9623613486 | bhushanzade02@gmail.com
GitHub | LinkedIn | Portfolio | LeetCode | HackerRank

SUMMARY

Graduate with hands-on experience in data analysis, machine learning, and statistical modelling through academic and personal projects. Skilled in using Python, R, and SQL for extracting insights, building models, and solving real-world problems. Strong foundation in statistics, and programming.

ACADEMIC PROJECT

Algonix Machine learning Library | Pune, India | 01/2025 – Present | Team size: 2

- Developed a machine learning library from scratch, implement classic ML algorithms such as simple linear regression, multiple linear regression, gradient descent, stochastic gradient descent, and logistic regression
- Added support for performance evaluation using Mean Squared Error (MSE), Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), R^2 Score, and Adjusted R^2 Score.
- Compared outputs of custom implementations from the **Algonix** library with equivalent models from **scikit-learn**

SMS Fraud Detection System | Pune, India | 04/2025 – Present | Team size: 1

- Developed a machine learning-based SMS fraud detection system to identify and classify fraudulent messages from machine learning algorithms
- Pre-processed SMS data by cleaning, tokenizing, and vectorizing text with techniques like TF-IDF and Word2Vec
- Implemented machine learning algorithms such as Logistic Regression, Random Forest, and Support Vector Machines (SVM) to create an effective classification model
- Evaluated the model's performance using metrics like precision, recall, F1-score, and accuracy to optimize fraud

Numerical Computing Library | Pune, India | 03/2025 – Present | Team size: 1

- Implemented fundamental operations for vectors and matrices including multiplication, inversion, LU decomposition, and Gaussian elimination. Developed support for vector and matrix arithmetic including addition, subtraction, multiplication, and scalar operations.
- Built numerical methods such as Newton-Raphson method for root-finding, numerical differentiation, and integration techniques Developed numerical differentiation methods using finite difference techniques (forward, backward, central). Demonstrated use of the library through sample programs for educational and academic purposes

SKILLS

- **Languages**: Python, SQL, R, C, C++
- **Libraries & Frameworks**: NumPy, Pandas, Matplotlib, Seaborn, scikit-learn, FastAPI, Nltk
- **Machine Learning**: EDA, Supervised & Unsupervised Learning, NLP, Statistical Inference
- **Tools & Platforms**: Jupyter Notebooks, Git, GitHub, Docker, Kaggle, Google collab

EDUCATION

MSC Scientific Computing | 7.64 SGPA | 05/2026
Scientific Computing, Modelling & Simulation | SPPU | Pune India

BSC Computer Science, Statistics, Mathematics | 7.09 CGPA | 05/2024
Government Institute of Science Nagpur | RTMNU | Nagpur India

HSC | 92 % | 2021 | and | SSC | 2019 | 80.80%
Tejasvi Vidya Mandir high school & Jr. College | Nagpur India