# **BHAVISHYA VUDATHA**

#### **TECHNICAL SKILLS**

Languages: Python, sql, Java, C#, C, C++, HTML, CSS, JavaScript.
Machine Learning: Supervised/Unsupervised Learning, Deep Learning, NLP
Framework: Tensorflow, Pytorch, Scikit-learn, ASP.NET MVC, VB.NET, React.
Data Analysis: Data Wrangling, Data Visualization, Statistical Analysis

• Tools: Jupyter NoteBook, Tableau, Excel, Visual Studio, Android Studio, GitHub

• Cloud & AI: Microsoft Azure, Docker, AWS.

## **PROFESSIONAL EXPERIENCE**

## Software Development Engineer- Accenture/AT&T, chennai, India

Dec 2019 - Mar 2023

- Led the enhancement and maintenance of 20+ Billing Operation applications using VB.NET, C#, JavaScript, and jQuery, improving backend efficiency and frontend communication, leading to a 15% reduction in user-reported issues.
- Facilitated the seamless transition of 5 on-premises database servers to Azure cloud infrastructure, ensuring 100% uptime during migration, which improved overall system scalability and reliability.
- Reduced development time by 50 man-hours per quarter by modifying and troubleshooting existing applications, adding 10+ new features, and resolving critical bugs. This also contributed to a 20% increase in team productivity.
- Re-engineered classic ASP.NET web applications into VB.NET, leveraging C# and JavaScript to modernize the codebase, resulting in performance improvement.
- Successful transformation of a ColdFusion application into ASP.NET MVC, which resulted in lowered maintenance.
- Optimized over 15 manual processes into automated solutions by designing and implementing SQL jobs, stored procedures, and new features in web applications, resulting in a 30% reduction in processing time and a 25% increase in task accuracy.
- Managed security issues and installations by coordinating with clients, ensuring adherence to best practices.

## **EDUCATION**

## Masters in Computer Science, University of Colorado Denver

Jan 2024 - Dec 2025

Coursework - Deep Learning, Mobile Computing, Algorithms, NLP & Generative AI, Machine Learning, Data Science.

Bachelor of Technology in Computer Science and Engineering, JNTUK University, India

July 2015 - May 2019

Coursework - C, C++, OOPS, Java, Data Structures, SQL, BigData.

#### **PROJECTS**

# **SpaceX Falcon 9 First Stage Landing Prediction**

- Designed a Machine learning algorithm to predict landing success of the Falcon 9 first stage based on various historical data.
- Collected and processed data using SpaceX's API from SpaceX official site and performed data wrangling using Pandas to clean, transform, and prepare the data, and managed it using SQLite.
- Executed EDA using Matplotlib and Seaborn to visualize hidden patterns and trends in the dataset.
- Used GridSearchCV to fine-tune hyperparameters, achieving the highest accuracy of 88.9% and an F1-score of 0.882 with the Decision Tree model, significantly outperforming other models (Logistic Regression, SVM, KNN)

#### **Image Classification**

- Developed a robust image classification model using transfer learning with pre-trained models (ResNet, VGG16), and customized the output layer for a multi-class classification task, accurately identifying over 3 distinct types of flowers.
- Executed and trained the model using TensorFlow and Keras, applying advanced <u>data</u> augmentation techniques like rotation, flipping, and scaling, which increased model accuracy by 15% through enhanced dataset robustness.
- Optimized the model performance by fine-tuning hyperparameters, including adjusting learning rate and employing early stopping, achieving an overall accuracy of 83%.

#### **Expense Tracker App**

- collaborated with a peer to build a mobile app using Android Studio, XML, Java for tracking personal expenses.
- The app features include recording daily expenses, tracking them on a daily and monthly basis, and adding new expense categories.
- Added multi-currency support to allow users to track expenses in various currencies.
- Integrated SQLite for efficient data storage and designed an intuitive user interface with XML.

# Shakespearean English to Modern English Translator

- Developed a Shakespearean-to-Modern English translator using the Hugging Face T5 transformer model.
- Performed data preprocessing, data augmentation (back translation), and evaluated using BERTScore and chrF metrics.
- Deployed a user-friendly web application with HTML, CSS, and Flask.

#### **CERTIFICATIONS**

- IBM DataScience Professional Certificate
- Stanford Machine Learning by Andrew NG
- Microsoft Azure Fundamentals