Muhammad Sikandar Subhani

Phone: (+92) 3054090834 (Mobile) | **Email:** sikandarsubhani37@gmail.com

WORK EXPERIENCE

JAN 2024 – CURRENT United Kingdom
WEB DEVELOPER WEBOTIST TECHNOLOGIES LTD

Main Activities and Responsibilities
Frontend Development
- Developed responsive web interfaces using HTML5, CSS3, and Bootstrap
- Implemented interactive user experiences with JavaScript
- Created dynamic form validation to enhance user input accuracy and security
- Optimized client-side performance and cross-browser compatibility

Backend Development
- Built robust web applications using **Python** and **Flask** framework
- Implemented Flask-WTF for comprehensive form handling and validation
- Configured Flask-Mail for efficient email communication and authentication
- Developed WSGI application configurations for seamless deployment
- Implemented advanced logging mechanisms for error tracking and debugging

Testing and Quality Assurance
- Developed comprehensive test suites using **Pytest**
- Implemented unit and integration tests to ensure application reliability
- Created mock objects and test fixtures to validate application functionality
- Conducted thorough testing across local and remote environments

Deployment and Infrastructure
- Diagnosed and resolved deployment issues in shared hosting environments
- Configured application paths and directory structures
- Managed file permissions and static file serving
- Implemented .htaccess rules for efficient routing

Additional Technical Achievements
- Developed comprehensive technical documentation and implementation guides
- Troubleshot email authentication challenges
- Configured SPF and DKIM records for enhanced email deliverability
- Utilized diagnostic tools like MXToolbox and Google Postmaster Tools

Website https://www.webotist.com/

PROJECTS

AI-Powered Skincare Recommendation System

Developed a Convolutional Neural Network (CNN) for advanced skin disease classification using Keras and TensorFlow, achieving Training Accuracy of 96.00% and Validation Accuracy of 97.00%, Classified 15 distinct skin conditions with high precision.

Machine Learning Architecture:
- Implemented custom deep learning model with 3-layer CNN
- Utilized RandomOverSampling to address class imbalance
- Applied swish activation functions and Nadam optimizer for enhanced model performance
- Processed 28x28 pixel dermatological images with precise preprocessing and normalization

Web Application Features:
- Created Flask-based web interface for seamless image uploads
- Integrated user authentication and secure file handling
- Developed intelligent recommendation system providing personalized treatment suggestions based on AI predictions
- Created end-to-end user journey from image upload to treatment recommendation

Model Specifications:
- Input Layer: 28x28x3 image dimensions
- Layers: 3 Convolutional, 3 MaxPooling, 1 Flatten, 2 Dense layers

LESCO AutoBill Reminder

- Engineered an automated Python-based bill retrieval system for LESCO electricity bills using **Selenium** WebDriver in Headless mode
- Developed advanced CAPTCHA solving mechanism using **Pytesseract OCR** to bypass login challenges
- Implemented dynamic multi-account bill tracking with log comparison to detect monthly changes
- Created robust error handling and retry mechanisms for seamless web scraping across different accounts
- Automated PDF bill download and storage with intelligent folder organization based on account and date
- Utilized logging module for comprehensive system monitoring and troubleshooting

Directory Synchronizer

- Developed a Python-based desktop application with GUI interface using **Tkinter** for automated directory synchronization
- Implemented real-time file system operations to efficiently compare and synchronize files between source and destination directories
- Incorporated error handling and user feedback mechanisms to ensure reliable file transfers and prevent data loss
- Utilized OS operations and file handling libraries (os, shutil) to manage cross-platform file system interactions
- Features include:
    - Intuitive graphical interface for directory selection
    - Intelligent file comparison using modification timestamps
    - Recursive directory traversal and structure preservation
    - Automated creation of missing directories
    - Real-time progress feedback and error reporting

Chess Console Game

- Interactive console interface with turn-based gameplay.
- Accepts user moves for each turn.
- Updates the chessboard dynamically with every input.
- Validates moves, handles check/checkmate, and includes draw conditions. Scalable, documented, and suitable for educational purposes.

EDUCATION AND TRAINING

OCT 2020 – JUL 2024 Lahore, Pakistan
BSCS University Of Lahore

- Programming Fundamentals & OOP
- Data structures and Algorithm
- Web Development & Database Management
- Operating System
- Artificial Management & ML

Field of study Programming, Software Development | **Thesis** AI-Based Skincare Recommendation System

CS50X : INTRODUCTION TO COMPUTER SCIENCE Harvard University

- C, Python, SQL, Flask, Algorithms

DIGITAL SKILLS

Python | C/C++ | JAVA | BASH | Git | Flask | Django | SQLAlchmey | WTForms | Jinja (Flask) | Pandas | Numpy | Scikit-Learn | OpenCV | Tensorflow | Selenium (Using Python script) | SQL | SQLITE3 | MySQL | OCR (Tesseract, Pillow)

HOBBIES AND INTERESTS

Chess, Playing Cards, Badminton