Swar Jadhav

Pesmcoe, Shivajinagar • Pune, MH • swarjadhav325@gmail.com • 9579820727 • github.com/Brokernlamp

Education

Savitribai Phule Pune University — Pune, MH
BE in Electronics and Telecommunication
CGPA: 7.72 **as of 7th semester (2024)**
Relevant Coursework: Honors in Data Science

Higher Secondary Certificate: — Daund, MH
Mary Memorial Jr. College — Aug 2018 – Mar 2020
Percentage: 77.63

Secondary School Certificate — Daund, MH
Mary Memorial High School — Jul 2017-Feb 2018
Percentage: 82.60

Skills

Programming Languages
- Python: Machine Learning, Data Analysis, Automation
- C/C++: Embedded Systems, Real-Time Applications
- JavaScript: Frontend Development (HTML, CSS)
- SQL: Database Management, Query Optimization

Microcontrollers
- PIC microcontrollers
- 8051 Microcontrollers
- NRF Microcontrollers
- Arduino (Mega, ESP, NANO, UNO)
- Jetson NANO

Frameworks & Libraries
- TensorFlow, Keras, Scikit-Learn, Pandas, NumPy
- OpenCV, ROS (Robot Operating System)
- Matlab, Scilab,

Embedded Systems & IoT
- Microcontrollers: Arduino, Raspberry Pi
- Embedded Software Development: C/C++ for Microcontrollers

AI & Machine Learning
- Machine Learning: Scikit-learn, TensorFlow
- Data Science: Pandas, NumPy, Matplotlib, Seaborn

Experience

Data Science Intern
YBI Foundation (Virtual Internship) Dec 2023 – Jan 2024

- Independently developed a handwriting classification model using the Random Forest algorithm to predict handwritten digits with high accuracy.
- Conducted data preprocessing, feature engineering, and model optimization to enhance the performance of the machine learning model.
- Completed the project by following a structured learning path with video-based instructions, applying machine learning techniques to solve real-world problems.
- Successfully submitted the project and received certification for demonstrating proficiency in machine learning and data analysis.

Data Analyst / Software Developer
Light-Based Reflex Tracking and Enhancement System
Topographix Equipment Pvt Ltd,Pune, MH
June 2024 – June 2025

- Developed and implemented a sports training system using interconnected pods with LED lights and touch sensors, designed to monitor and enhance player performance.
- Created and optimized algorithms using advanced data structures (arrays, trees, graphs) for real-time analysis of key metrics such as agility and reaction time, improving computational efficiency by 40%.
- Analyzed player performance data to generate personalized insights and exercise recommendations, implementing database schemas and SQL queries for efficient data management.
- Led a cross-functional team in developing a mobile app interface, ensuring effective Bluetooth communication between hardware components and the application for real-time feedback.
- Designed and implemented robust error-handling procedures throughout the system, solving complex technical challenges through systematic problem decomposition and testing.

Accomplishments:

- **Secretary, TEESA Club**: Led technical workshops on AIML, Web Development, DSA, PCB printing, Arduino, and advanced Arduino techniques.
- **Machine Learning Certification**: Successfully developed and submitted a handwriting classification model.
- **Hackathon Project on Elderly Safety using AI**: Collaborated with a cross-functional team of 5 members to develop the mobile app interface, coordinating requirements and maintaining regular communication to ensure project success
- **Sign Language Translator Glove Project**: Developed a glove that translates sign language into text and created educational content explaining the technology on YouTube, demonstrating both technical innovation and communication skills.
- **Academic Project in Software Development**: Designed normalized database schemas and wrote optimized SQL queries to store and analyse Library Management in College, demonstrating proficiency in database management.

Languages:

- **English:** Advanced (C1)
- **Hindi:** Advanced (C1)
- **Marathi:** Bilingual or Proficient (C2)