

Afsal Rahiman T

AI&ML Developer | Python Developer | Machine Learning & NLP

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CAREER OBJECTIVE

Highly motivated B.Sc undergraduate specializing in Artificial Intelligence and Machine Learning, with a strong interest in Predictive modeling, Machine Learning, and AI development. Developed solid foundational skills in Python, machine learning algorithms, and AI concepts through academic coursework, internships, and personal projects. Committed to continuous learning, building intelligent systems, and contributing effectively within collaborative engineering teams.

SKILLS

AI&ML Domains: Machine Learning, Deep Learning, Natural Language Processing (NLP), Computer Vision, Predictive Modeling.

Programming Languages: Python, R, HTML, CSS, Java (Basic)

Libraries: Pandas, NumPy, OpenCV, MediaPipe, Scikit-learn, XGBoost, NLTK

Tools & Web: Flask, Streamlit, Git/Github, Jupyter Notebook, VS Code, Selenium, Jmeter

Soft Skills: Problem-solving, Critical Thinking, Agile Team Collaboration, Professional Communication, Time Management.

KEY PROJECTS

1. Real-Time Network Packet Classifier (IDS) | *Python, Scikit-learn, Scapy, Flask, NLP (TF-IDF)*

- Built an AI-powered Intrusion Detection System (IDS) to classify network traffic as "Benign" or "Malicious" in real-time.
- Pioneered an NLP-based approach by treating packet payloads as text and vectorizing them using TF-IDF.
- Designed a live Flask dashboard to visualize threat levels and alerts instantly without page reloads.

2. Laptop Price Prediction & Recommendation Platform | *Python, XGBoost, Streamlit, Pandas*.

- Developed a full-stack data science application for accurate laptop price prediction using XGBoost Regressor.
- Built an end-to-end ML pipeline with automated data cleaning, imputation, and feature encoding.
- Created a weighted recommendation algorithm to score laptops based on user personas (Gaming, Coding, Content Creation).

3. AI Gesture-Controlled Interface & Voice Assistant | *Python, OpenCV, MediaPipe, Autopy*

- Engineered a touch-free Human-Computer Interface (HCI) allowing users to control the system mouse and clicks using hand gestures.
- Implemented geometric algorithms for real-time hand tracking and smoothing to reduce cursor jitter.
- Integrated a multi-threaded Speech-to-Text engine for concurrent voice typing alongside gesture control.

INTERNSHIP / TRAINING

Software Testing Intern

Jun 2025 – Oct 2025

Intersmart Edutech

- Executed manual test cases and reported defects using bug-tracking tools.
- Created automated browser tests with Selenium (Java) and performed basic performance testing with JMeter.

AI Intern

May 2024 – July 2024

Skolar

- Researched advanced AI algorithms and gained hands-on experience in training models.
- Collaborated with peers to solve algorithmic challenges and implement prototypes

Machine Learning Intern

April 2024 – May 2024

Softronics

Palakkad, Kerala

- Acquired in-depth knowledge of Supervised Learning techniques and feature selection.
- Applied core ML concepts to develop predictive models for dataset analysis.

Python Intern

April 2023 – May 2023

Softronics

Palakkad, Kerala

- Developed a strong command of Python syntax, OOP principles, and standard libraries.
- Automated basic tasks and handled data manipulation using Pandas and NumPy.

Soft Skills Training

July 2024

Infosys BPM Limited

15 Days

- Completed intensive training on professional communication, team dynamics, and email etiquette.
- Enhanced presentation skills and effective time management strategies.

CERTIFICATIONS/SHORT COURSES

- Internet of things (IOT)
- R programing
- Full stack development
- Software Testing

ACADEMIC BACKGROUND

Bachelor of Science - Artificial Intelligence and Machine Learning

Coimbatore,Tamil Nadu

Bharathiyar university

2022-2025

Higher Secondary Education

Palakkad, Kerala

GHSS, Erimayur

2020-2022