Singh J

AI ML Developer, 3+ years experience
New Delhi, India
https://talrn.com/profile/ai-ml-developer-singh-j/talf8906

+91 9820045154 | hr@talrn.com

Results-driven individual with expertise in Python, Machine Learning (ML), Deep Learning (DL), Computer Vision, and Natural Language Processing (NLP). Skilled in developing and deploying AI-powered applications, leveraging TensorFlow, PyTorch, BERT, Flask, and API integration. Experienced in object detection, metaheuristic optimization (Genetic Algorithms), recommendation systems, and data preprocessing. Proficient in tuning model performance. Published IEEE author with proven research, problem-solving, and analytical skills. Adept at collaborating in agile environments, delivering scalable solutions, and applying software development lifecycle (SDLC) best practices.

INDUSTRIES: Staffing and Recruitment, Media and Communication, SaaS, Information Technology, Web 3, Banking and Finance

TECHNICAL SKILLS

• Python	2 years & 6 months
• Machine Learning	2 years & 6 months
• Deep Learning	2 years & 6 months
• TensorFlow	2 years & 6 months
• PyTorch	2 years & 6 months
• NumPy	2 years & 6 months
• Selenium	2 years & 6 months
• BERT	2 years & 6 months
• Flask	2 years & 6 months
• API Integration	2 years & 6 months
• Pillow	2 years & 6 months

SOFT SKILLS

Problem-solving

PROJECT DETAILS

• Resume Recommendation System

Project Description: Created a semantic resume classification and recommendation engine using BERT combined with TF-IDF cosine similarity for ranking candidate matches.
Responsibilities: Developed backend components for machine learning models; implemented BERT-based semantic classification; integrated TF-IDF and cosine similarity algorithms for ranking; collaborated on system design and testing; ensured model robustness and scalability in deployment.
Technologies: Python, BERT, TensorFlow, TF-IDF
Industry: Staffing and Recruitment

• AI ATS Score Prediction System

Project Description: Developed an AI-powered predictive system that scores applicant resumes using ML models to feed Applicant Tracking Systems (ATS)
Responsibilities: Implemented backend model inference and API endpoints with Flask; researched and evaluated various pretrained machine learning models; optimized frontend-backend integration; maintained performance and reliability of model predictions.
Technologies: Python, NumPy, Flask
Industry: Staffing and Recruitment

• AI Post Generator

Project Description: Created a web application for generating customizable social media posters using image processing and drag-and-drop editing.
Responsibilities: Developed backend services with Flask; integrated image processing via Pillow; designed frontend UI with HTML/CSS/JavaScript; researched industry-leading design tools to incorporate best practices; implemented export and theme generation features.
Technologies: Flask, Python, Pillow, HTML/CSS/JavaScript
Industry: Media and Communication

• AI Email Sender

Project Description: Implemented an AI-driven bulk email sender with mail merge capabilities for multi-channel campaigns.
Responsibilities: Designed and developed backend mailing logic using SMTP, email.mime, and threading for concurrency; built Flask-based REST API for seamless frontend integration; researched existing bulk email tools and incorporated state-of-the-art features; ensured scalability and email deliverability.
Technologies: Python, SMTP, email.mime, threading, flask-cors
Industry: SaaS

• Social Media Sentiment Analyser

Project Description: Designed a tool to analyze sentiment of social media posts from multiple platforms in real time using NLP models like BERT and TextBlob.
Responsibilities: Built backend APIs with Flask; scraped social media data securely using Selenium and cookie-based authentication; preprocessed text data and performed live sentiment classification; created interactive data visualizations and export functionality; maintained accuracy and performance.
Technologies: Python, Flask, Selenium, NLP, BERT, TextBlob
Industry: Media and Communication

• Automated LinkedIn Job Post Monitoring and Lead Qualification

Project Description: Automated discovery and qualification of relevant LinkedIn job posts, applying a rule-based scoring engine to filter opportunities.
Responsibilities: Developed scraping and parsing using Selenium and BeautifulSoup; created backend Flask service to score and visualize data; designed and integrated email notification system for high-scoring leads; ensured robust dynamic data graphing; maintained system security and session handling.
Technologies: Python, Selenium, BeautifulSoup, Flask
Industry: Staffing and Recruitment

• Web Scraper for Job Listings

Project Description: Built a scalable web scraper to extract job data from multiple online portals, with an interactive frontend to display results.
Responsibilities: Developed backend scraper using Selenium for dynamic page handling; trained and fine-tuned scraping models; integrated data extraction with Flask frontend; ensured robust, maintainable codebase; managed data flow pipelines and error handling.
Technologies: Python, Selenium, Flask, LLM, TQDM
Industry: Staffing and Recruitment

• Object Detection using YOLOv8 with Genetic Algorithm

Project Description: Developed a wildlife object detection system optimizing hyperparameters through a Genetic Algorithm, achieving a 0.95 mAP on a multi-class mosaic image dataset.
Responsibilities: Conducted in-depth research on object detection methods; designed and implemented a custom CNN model; applied Genetic Algorithms for tuning; handled GPU-accelerated training using PyTorch, torchvision, and DEAP libraries; performed data preprocessing and model evaluation to maximize accuracy.
Technologies: Python, PyTorch, torchvision, DEAP (Genetic Algorithm), THOP, scikit-learn, Pillow, Matplotlib, TQDM, NumPy, CUDA (GPU)
Industry: Information Technology

• Wallet Risk Scoring in DeFi

Project Description: Built a blockchain transaction behavior-based risk scoring system for Compound V3 wallets, analyzing on-chain activity for lender decisions.
Responsibilities: Designed data pipelines using Covalent API; engineered wallet-level features from protocol-specific events; developed explainable and weighted risk scoring algorithms; performed statistical preprocessing and normalization; created extensible Jupyter Notebooks for analysis
Technologies: Python, Covalent API, Jupyter Notebook, Pandas, NumPy, scikit-learn
Industry: Web 3

• Wallet Credit Scoring using KMeans Clustering

Project Description: Created an unsupervised clustering model to assign credit scores to crypto wallets based on transactional patterns in Aave V2 protocol.
Responsibilities: Engineered features and performed wallet-level data aggregation; standardized data and implemented KMeans clustering; developed cluster ranking and credit scoring algorithms; visualized and documented results; facilitated extensibility for additional DeFi protocols.
Technologies: Python, Jupyter Notebook, Scikit-learn (KMeans), Pandas, NumPy
Industry: Web 3

• Financial Document Analyzer

Project Description: Developed a FastAPI service for automated parsing and AI-driven insight extraction from financial PDF documents. Responsibilities: Architected API design and endpoints; implemented PDF parsing and text extraction pipeline; configured CrewAI agents for natural language querying; resolved multipart form and dependency issues; ensured comprehensive error handling and user-friendly API documentation.
Responsibilities: Architected API design and endpoints; implemented PDF parsing and text extraction pipeline; configured CrewAI agents for natural language querying; resolved multipart form and dependency issues; ensured comprehensive error handling and user-friendly API documentation.
Technologies: Python, FastAPI, CrewAI, PyPDF2, Uvicorn
Industry: Banking and Finance

EMPLOYMENT HISTORY

• AI ML Developer

EDUCATION

• Masters degree in Information Technology from Amity University 2021 - 2023

• Bachelors degree in Computer Applications from Guru Gobind Singh Indraprastha University 2018 - 2021

LANGUAGES

• English - advanced

END OF DOCUMENT

This PDF is automatically generated by Talrn on 20 Nov 2026
Profile URL:https://talrn.com/profile/ai-ml-developer-singh-j/talf8906