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Position: Full Stack Web & AI Engineer
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Objective

Motivated software engineering student with a passion for data science, machine learning, and web development. Committed to expanding expertise and staying updated with the latest advancements. Excited to contribute to an innovative team that values challenges. Seeking to make a meaningful impact and grow professionally within a progressive organization.

Educations

Bachelor's in (Software Engineering (4 Years)   2020 to 2024
University of Swat (Pakistan)

Skill Summary

Programming & Scripting Languages: Python, JavaScript, HTML, CSS, Tailwind CSS, SQL

Machine Learning & AI: Supervised Learning, Unsupervised Learning, CNN, RNN, LSTM, DNN, Conv1D, Hybrid Models, Generative AI, OpenAI API, Chatbots, Retrieval-Augmented Generation, Computer Vision, YOLOv8, Image Preprocessing, Video Super-Resolution, NLP, Sentence Transformers, Embeddings, Object Recognition, Text Classification, Recommendation Systems, Feature Extraction, Normalization, Standardization, Data Augmentation, Imbalance Handling

Data Analysis & Visualization: Pandas, NumPy, Imblearn, BioPython, DataFit, Matplotlib, Power BI, Recharts, MySQL, PostgreSQL, Vector Search, pgvector

Web Development: React.js, Flask, Fast API, Laravel (Basics) , REST APIs, Node.js (Basics) , PostgreSQL, Docker, Railway, Vercel, Role-Based Access Control, JWT Authentication, Responsive UI, UI/UX Design, Figma

DevOps & Deployment: Docker, Railway, Vercel, AWS S3, Multi-Threaded GPU Optimization

Tools & Platforms: Jupyter Notebook, Streamlit, Groq API, Git, GitHub, AutoCAD, Revit, NEBOSH, DocxBox, PPT Tools, Mockster.ai, QuickHire.ai, PySnipify-ML

Soft Skills: Communication, Collaboration, Problem-Solving, Adaptability, Time Management, Continuous Learning

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Industrial Experiences

Founder & Full Stack Dev   Jun 2023 – current (Part-Time)
MenteE (Startup)   Remote-first (global)
- Founder of MenteE, an AI startup developing intelligent solutions to enhance productivity across industries.
- Launched RecruAI, an AI-driven recruitment platform featuring automated interviews, intelligent matching, and profile management.
- Leading development of cvAI, pptAI, vidAI, and docxbox, tools for AI-enhanced resumes, presentations, videos, and document management.

Python Developer   Nov 2024 – Jan 2025
Suvastutech   Swat, Pakistan
- Collaborate on developing machine learning models and algorithms to solve real-world problems.
- Assist in data preprocessing, feature engineering, and model evaluation to enhance predictive accuracy.
- Participate in team discussions to refine project goals and contribute to innovative AI solutions.

Machine Learning Engineer and COO   Apr 2023 – Dec 2023
AI3 (Start-Up)
- Developed an innovative module using generative AI that enables interactive chat capabilities with PDFs, enhancing document accessibility and user engagement.
- Led the design and deployment of machine learning models, ensuring their integration into company products to optimize functionality and user experience.

- Managed cross-functional teams, coordinating efforts between engineering, product development, and marketing to align with strategic business goals.
- Oversaw day-to-day operations and contributed to high-level decision-making, driving the company's growth and technology strategy.

Internship Experiences

Machine Learning Engineer, SkillBuild July 2024 Sep 2024
Coimbatore North, Tamil Nadu, India Remote

Machine Learning Engineer, InternCareer Nov 2023 - Dec 2023
Managaluru, Karnathka, India Remote
Machine Learning Engineer, CodeAlpha OCT 2023 - Nov 2023
Lucknow UP, India Remote

Data Science Intern, CodeSoft Sep 2023 - OCT 2023
West Bangal. India Remote

Front-End Developer, Interns.pk Aug 2023 - Sep 2023
Sindh Pakistan Remote

Web Developer, LetsGrowMore July 2023 - Aug 2023
India Remote

Web Developer, INeoron.ai July 2023 - Aug 2023
India Remote

Projects

MenteE/RecruAI
- Developed an AI-powered recruitment platform with intelligent candidate-employer matching, automated AI interviews, and comprehensive profile management.
- Built full-stack application using Flask, React, PostgreSQL, and Docker, integrating multiple AI providers for real-time chat and document analysis.

DocxBox **Hobby Project**
- Created an AI-enhanced document management system with collaborative editing, version control, and automated formatting features.
- Implemented secure authentication, AI-based content suggestions, and a responsive front-end for real-time editing and feedback.

StichPoint
- Developed a full-featured e-commerce platform for couture using React, Vite, Flask, and PostgreSQL to digitize couture operations, including user registration, product management, order processing, analytics, and commission tracking.
- • Integrated third-party tools (Leaflet, Recharts, React Icons, React Hot Toast) to enable map-based store locations, dynamic analytics visualizations, notifications, PDF report generation, and responsive UI components.
- • Implemented role-based access control with dedicated dashboards for customers, managers, and super admins, enhancing security and user experience while supporting product reviews, wishlist management, cart functionality, and multi-level workflows in a unified platform.

Laboratory Management System **For Client**
- Developed a full-featured Laboratory Management System using Laravel 8 and MySQL to digitize lab operations, including patient registration, test reporting, billing, and inventory tracking.
- Integrated HL7 middleware and third-party tools (mPDF, Yajra DataTables) to enable automated instrument data parsing, SMS notifications, PDF report generation, and dynamic data handling.
- Implemented role-based access control and a patient portal, enhancing security and user experience while supporting admin, staff, and patient workflows in a single unified platform.

CakeBake   **For Client**
- Built a full-stack e-commerce web platform for a bakery business, enabling customers to browse, customize, and order cakes online with real-time options (e.g., size, flavor, message).
- Designed and implemented RESTful backend APIs in Laravel to handle product catalog management, shopping cart logic, and end-to-end order processing (including status tracking and notifications).
- Integrated responsive frontend components with secure checkout and user authentication, and supported deployment to a production environment for seamless customer experience.

AI Video Super-Resolution System (Freelancing)   **For Client**
- Built a real-time video enhancement pipeline using Real-ESRGAN + TensorRT that upscales videos 2x-4x (SD to 4K) achieving 98.6 VMAF scores under 35-second processing constraints with FastAPI microservices and GPU acceleration.
- Developed scalable architecture with Docker, Redis, AWS S3, and multi-threaded processing (16-32 threads) using OpenCV, FFmpeg, and CUDA optimization for automated video scoring (LPIPS, PieAPP, VMAF) and deployment.
- Optimized AI inference by converting PyTorch models to ONNX/TensorRT, implementing hybrid AI+interpolation processing, reducing computation time 60% while maintaining broadcast quality for competitive video enhancement tasks.

Secure your school   **For client**
- SYS is a real-time school security system using YOLOv8 for weapon detection and SmolVLM-500 with LLaMA.cpp for generating image-based event descriptions.
- Integrates deep learning, vision models, and local LLMs to create an intelligent, offline-capable surveillance solution for educational institutions.

Face Recognition using OpenCV   **Developed under 5 Hours for client**

- Created a robust face detection system using OpenCV to identify and localize multiple faces in real-time images.

CVChat   **Developed under 12 Hours for company**
- Developed a Django-based CV chatbot leveraging Sentence Transformers for semantic understanding and intelligent user interaction.
- Deployed a full-stack solution with a PostgreSQL backend (Railway) and Vercel-hosted frontend, integrating CORS, REST APIs, and file handling.
- Implemented resume parsing, embedding generation, and real-time Q&A, enabling natural language queries over uploaded documents. (Groq)

Mockster.ai   **Developed under 3 days**
- Mockster.ai is an AI-driven interview simulator that offers real-time question generation and video-based responses.
- It provides instant feedback using speech and text analysis to help users improve communication and confidence.
- Built with React.js, it integrates STT, TTS, and secure JWT-based authentication for a realistic experience.

QuickHire.ai   **Developed under 3 days**
- QuickHire.ai is an AI-powered recruitment toolkit built with React.js and Supabase.
- It streamlines hiring through smart tools like AI email writing, cover letter generation, and job ad optimization.
- Designed for speed and personalization, it showcases expertise in full-stack development and AI integration.

PySnipify-ML
- Developed PySnipify-ML, a VS Code extension designed to streamline machine learning development by providing ready-to-use code snippets.
- Integrated a comprehensive collection of Python snippets covering essential tasks such as string manipulation, loops, and data structures to improve coding efficiency.
- Added pre-built snippets for key machine learning workflows, including data preprocessing, model training, and evaluation, enhancing developer productivity and accelerating project deployment.

Retrieval Augmented Generation (Suvastutech)

- Developed a Retrieval-Augmentation Generator (RAG) using Python, PostgreSQL, HTML, CSS, and JavaScript for an e-commerce website to enable intelligent search and question-answering functionality.
- Implemented TF-IDF vectorization with 100 vector dimensions and stored them in PostgreSQL using the pgvector extension for efficient similarity searches.
- Configured IVFFlat indexing and TSVectors in PostgreSQL for optimized vector-based retrieval and natural language search capabilities.
- Integrated Groq API to enable product-specific retrieval and question answering, enhancing the e-commerce experience with AI-driven insights.

Breast Cancer Classification
- Utilized a hybrid model of LSTM, CNN, and RNN for accurate classification of breast cancer from imaging data.

Classification of Wine Type
- Developed a DNN to classify different wine types based on physicochemical properties for enhanced quality assessment.

DataFit (Final Year Project)   Jan – 2024 to Nov - 2024
- Utilized pre-built functions for data cleaning, including handling missing values and processing categorical and text data.
- Employed pre-built methods for data normalization and standardization to improve model performance.
- Applied feature extraction, transformation, and selection techniques using pre-built utilities to enhance model accuracy.

Talk to PDF
- Developed a Streamlit application leveraging OpenAI Embeddings API to enable interactive question-and-answer functionality with PDF documents.
- Implemented a generative AI solution that allows users to extract specific information and insights from PDFs through natural language queries.
- Improved document accessibility and usability, supporting educational and professional users in efficiently extracting and compiling information from large PDFs.

Chat Bot using Generative AI
- Developed a chatbot application using Streamlit and OpenAI's generative AI API, providing a conversational interface for users to ask questions and receive answers.
- Emulated the functionality of Chat-GPT, offering a natural language processing experience with real-time responses to user queries.
- Showcased proficiency in integrating generative AI models into practical applications, demonstrating strong skills in AI-driven user interaction.

Research (Not Published)

Classification of Heart Disease
- Developed a model combining CNN and RNN with LSTM layers to predict heart disease based on medical data.

Classification of Coronary Artery Disease
- Implemented a CNN-based approach for the classification of coronary artery disease from patient datasets.

Classification of Malaria Cells
- Designed a CNN model to classify malaria-infected cells from microscopy images for improved diagnostic accuracy.

Lungs Disease Classification
- Combined CNN and RNN architectures to classify lung diseases from imaging data, facilitating faster diagnostics.

Diabetic Retinopathy Detection
- Developed a deep learning model for detecting Diabetic Retinopathy (DR) using CNN architectures, analyzing retinal fundus images for early diagnosis.
- Employed image preprocessing techniques like contrast enhancement, denoising, and augmentation to improve model accuracy and robustness.

Certificates

- **Digital Marketing**, Hobspot Academy
- **Introduction to Git and GitHub**, Gymnasium
- **Introduction to SQL**, DataFlair

Learn to Code in Python 3, Udemy
NumPy and Pandas, DataFlair
Data Manipulation with Python, Udemy

- **The Python Developer Essential Immersive Bootcamp**, Udemy
- **Data Visualization with PowerBI**, Udemty
- **Prompt Engineering for Chat GPT**, Great Learning
- **Basic of Generative AI**, OpenWeaver

JavaScript Essentials 1, Cisco

Public Speaking, Udemy
Machine Learning Algorithms, Great Learning
Certificate of Appreciation, NIC Swat

Bootcamps

- **B.E.S.T Build Entrepreneurship Skill Training,** Red International

Mar 2024

Badges

- **Discover Data Analysis**, Microsoft
- **Building with Power BI**, Microsoft
- **Data Science: Pandas**, Leet Code

- **Android Studio**, Google for Developers
- **JavaScript Essential 1**, Cisco
- **Learning Enthusiast**, Open Weaver INC

References

- Available upon request