# MUHAMMAD HANZLA SARWAR

+92(331) 722-2791 ⋄ Islamabad, Pakistan

sarwarhanzla327@gmail.com ⋄ linkedin.com/MuhammadHanzlaSarwar ⋄ github.com/HanzlaSarwar327

## OBJECTIVE

Computer Vision and AI Enthusiast with 2 years of experience in developing and optimizing deep learning models, seeking full-time roles in AI, ML, and Computer Vision.

## EDUCATION

**Bachelors of Computer Science**, HITEC University                                    2021- Expected 2025

Relevant Coursework: Artificial Intelligence, Machine Learning, Deep Learning.

**Intermediate**, Fauji Foundation College                                                        2018 - 2020

## SKILLS

**Technical Skills:**       Model Optimisation, Computer Vision, Deep Learning

**Soft Skills:**            Time Management, Adaptability, Problem Solving

## EXPERIENCE

**Project Manager**                                                                          Nov 2024 - Jan 2024

Digital Empowerment
Network                                                                                      *Islamabad, PK*

- Achieved growth in web development projects using leadership, technical proficiency, and communication.
- Led cross-functional teams, improving timely and high-quality project delivery.
- Developed strategies enhancing efficiency through modern web technologies and best practices.

**Technical Support Lead**                                                                   Oct 2024 - Jun 2024

Digital Empowerment Network                                                                  *Islamabad, PK*

- Streamlined internship operations using organizational, technical, and communication skills.
- Managed Google Classroom setup and mentoring sessions.
- Optimized communication through WhatsApp groups for seamless mentor intern interaction.

**Information Security (Intern)**                                                            Aug 2022 - Sep 2022
AKSA SDS (Pvt) Ltd                                                                           *Islamabad, PK*

- Risk Assessment & Vulnerability Management.

- Network Security & Threat Detection.

- Assisting in responding to and managing security incidents.

## PROJECTS

**Brain Tumour Segmentation:**
Developed a brain tumour segmentation tool using the U-Net architecture, achieving high accuracy in identifying and segmenting tumours in medical images. The model efficiently processes MRI scans to provide precise segmentation results, aiding in early detection. Over 500+ test images have been processed, with the system showing results that outperform traditional methods in both speed and accuracy.

**Heart Attack Prediction:**
Created a heart attack prediction model using CSV data, achieving 98% accuracy in predicting the likelihood of a heart attack based on various health parameters. The model uses machine learning algorithms to analyse the data and provide early warning signs, helping in proactive healthcare management. The solution has been tested on diverse datasets and demonstrates high reliability in risk prediction.

**Skin Cancer Detection:**
Developed a skin cancer detection system using the HAM10000 and ISIC 2019 datasets, leveraging transfer learning with pre-trained models to enhance feature extraction and improve classification performance. The project includes comprehensive data preprocessing steps, such as normalization and augmentation, to ensure robust model training. Additionally, explainability AI techniques were integrated to provide transparent and interpretable results, aiding healthcare professionals in understanding model predictions.

**E-Mail Spam Filtering:**
Built an e-mail spam filtering system using a pipelining model, achieving 98% accuracy in classifying emails as spam or non-spam. The model integrates multiple stages, including text preprocessing, feature extraction, and classification, to efficiently filter out unwanted emails. This solution is optimized for speed and reliability, ensuring high performance in real-world applications.

## EXTRA-CURRICULAR ACTIVITIES

- Provided digital volunteering services during the Pakistan floods in 2022, assisting in organizing relief efforts, coordinating communication, and offering support to affected communities through online platforms.

- Served as Media Head in Hi-Robo Tec Society in 2022, leading content creation, social media management, and communication strategies to enhance the society's visibility and engagement.

- Served as Assistant Media Head in Hi-Robo Tec Society in 2021, supporting media strategies, content development, and event promotions to increase the society's outreach and engagement.