



Machine Learning

www.digitalempowermentpakistan.com



About Us

At Digital Empowerment, we envision a future where youth are equipped with the skills, knowledge, and mindset needed to thrive in a rapidly evolving world. Our mission is to bridge the digital divide, foster leadership development, and enhance academic growth, empowering young minds to realize their full potential.

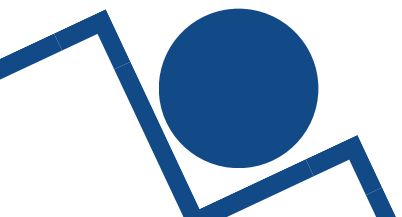
To achieve this, we offer comprehensive virtual internships across various domains, providing students with invaluable hands-on experience and practical skills essential for success. Furthermore, we are committed to assisting exceptional students in securing positions at prestigious companies, helping to launch their careers and build a brighter future for themselves and future generations.



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Instructions

1. Enhance your online presence by updating your LinkedIn profile.
2. For successful completion of the internship, complete one level (Level 1, 2, or 3) of the Web Development internship at your own pace.
3. Keep your tasks organized in a separate GitHub repository named "DEP" and share the link in the task submission form.
4. Utilize online resources like Google Search, tutorials, and videos to assist you in completing the tasks.





Task 4



Image Classification:

□ **Objective:** Build a model to classify images into different categories.

□ **Description:** Use a labeled dataset of images (e.g., CIFAR-10, MNIST) to train a deep learning model that can classify images into predefined categories.

□ **Key Steps:**

- o Data augmentation and preprocessing (e.g., normalization, resizing)
- o Building a convolutional neural network (CNN)
- o Training the model with a training dataset
- o Model evaluation and fine-tuning using a validation dataset
- o Handling overfitting with techniques like dropout and regularization