

- We have the login page at the beginning , where we can navigate to sign up page and back.

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## Login

Dark Mode

Username

a

Password

•

Login

New user?... click here to Register

**Sign Up**

Dark Mode

**Username**

a

**Password**

.

**Confirm Password**

Sign Up

Already have an Account?  
Login

## After Login

**You can either click and add, or drag and drop to “upload images (s) section”**

SEARCH ANNOTATED IMAGES

Drag and drop images here or click to upload images to Annotate. Minimum  
expected size : 800 x 600

UPLOAD IMAGE(S)

If you upload images, it will show up like below, you can **either annotate them one by one** by the 10 buttons showed up beside each image, **or a “group select” button for each annotation** is added at the top. for e.g. : if you click “group select airplane ” button, all images will be annotated as airplane.

There are options to cancel images individually , or as a whole.

SEARCH ANNOTATED IMAGES

LOGOUT

Drag and drop images here or click to upload images to Annotate. Minimum expected size : 800 x 600

UPLOAD IMAGE(S)

CANCEL ALL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

$$(\bar{X}_i Y) - (\bar{X}_i \bar{Y})$$

A submit button will show up , only if you annotate at least one image. After clicking submit , the images will start uploading. There is a thin progress bar at the bottom showing progress

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

TRUCK

CANCEL

AIRPLANE

AUTOMOBILE

BIRD

CAT

DEER

DOG

FROG

HORSE

SHIP

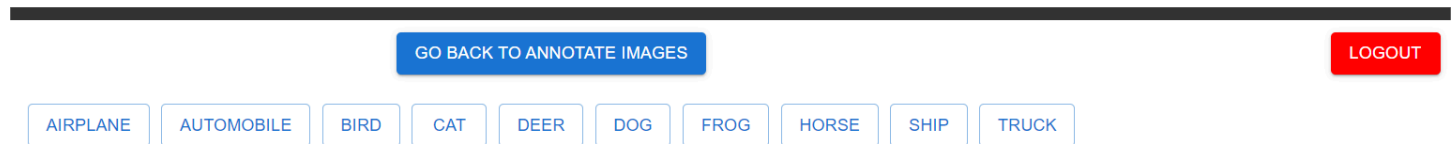
TRUCK

CANCEL

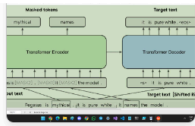
SUBMIT ALL >

## Search Annotated Images page

Here you can simply select any of the 10 classes , and the corresponding images will show up in the empty space



Pagination is implemented, **if retrieved images exceed 25 images , page labels and “previous page” and “next page” buttons will show up**



$$w_1^* = \frac{(X_1 Y) - (X_1 \bar{Y})}{X_1^2 - (\bar{X}_1)^2}$$

```
def train(train_loader, val_loader, model, optimizer, device):
    # Training loop
    for epoch in range(1, num_epochs + 1):
        # Training
        train_loss = 0
        train_acc = 0
        for batch_idx, (data, target) in enumerate(train_loader):
            data, target = data.to(device), target.to(device)
            optimizer.zero_grad()
            output = model(data)
            loss = criterion(output, target)
            loss.backward()
            optimizer.step()
            train_loss += loss.item()
            train_acc += accuracy(output, target)

        # Validation
        val_loss = 0
        val_acc = 0
        for batch_idx, (data, target) in enumerate(val_loader):
            data, target = data.to(device), target.to(device)
            output = model(data)
            loss = criterion(output, target)
            val_loss += loss.item()
            val_acc += accuracy(output, target)
```

Dark Mode

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Registration form with fields for name, email, and password.

Registration form with fields for name, email, and password.

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Registration form with fields for name, email, and password.

Confusion Matrix

	0	1	2	3
0	1000	0	0	0
1	0	1000	0	0
2	0	0	1000	0
3	0	0	0	1000

Classification Report

	precision	recall	f1-score	support
0	1.00	1.00	1.00	1000
1	1.00	1.00	1.00	1000
2	1.00	1.00	1.00	1000
3	1.00	1.00	1.00	1000
accuracy	1.00	1.00	1.00	4000
macro avg	1.00	1.00	1.00	4000
weighted avg	1.00	1.00	1.00	4000

Confusion Matrix

	0	1	2	3
0	1000	0	0	0
1	0	1000	0	0
2	0	0	1000	0
3	0	0	0	1000

Classification Report

	precision	recall	f1-score	support
0	1.00	1.00	1.00	1000
1	1.00	1.00	1.00	1000
2	1.00	1.00	1.00	1000
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Confusion Matrix

	0	1	2	3
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2	0	0	1000	0
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	precision	recall	f1-score	support
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Classification Report

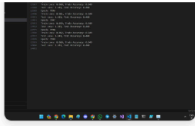
	precision	recall	f1-score	support
0	1.00	1.00	1.00	1000
1	1.00	1.00	1.00	1000
2	1.00	1.00	1.00	1000
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1	0	1000	0	0
2	0	0	1000	0
3	0	0	0	1000

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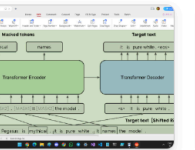
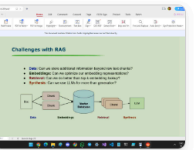
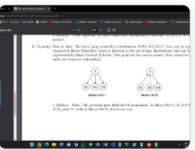
	precision	recall	f1-score	support
0	1.00	1.00	1.00	1000
1	1.00	1.00	1.00	1000
2	1.00	1.00	1.00	1000
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