Free-hand Sketch Recognition

Vanitha Kunta

Sai Nikhita Nayani

Akshitha Gajawada

Contents

- Description
- Challenges
- Tech Stack
- Progress
- Project Plan
- Future Scope

Description

- Provides web interface for drawing
- Captures the image
- Recognizes the object using CNN

Challenges

- Large intraclass deformations
- Less detailed
- Sketch orientation

Tech Stack

- Framework
  - Django
- Frontend
  - HTML, CSS, JS
- Backend
  - Python
- Modules
  - OpenCV, Keras(Imagenet, LeNet, ResNet)

Progress

- TU Berlin dataset (20000 samples - 250 categories)
- Research papers
- Django overview

Project Plan

- ▶ Front end development (week1 - 2 days)
- ▶ Image Processing (week1 - 3 days)
- ▶ Neural Networks (week2 - 5 days)
- ▶ Integration and improve accuracy (week3)

Future Scope

- Display similar images
- Detect objects of different categories
- Recognize object at every step

Discussions