



"YASHIL IQTISODIYOT
VA TARAQQIYOT"

IV GLOBAL VA MILLIY IQTISODIYOT TRENDLARI:
"O'ZBEKISTON – 2030" STRATEGIYASI

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2030
UZBEKISTAN
STRATEGY

CONFERENCE "GLOBAL
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GLOBAL VA MILLIY IQTISODIYOT TRENDLARI:
"O'ZBEKISTON – 2030" STRATEGIYASI

GLOBAL AND NATIONAL ECONOMIC
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ГЛОБАЛЬНЫЕ И НАЦИОНАЛЬНЫЕ
ЭКОНОМИЧЕСКИЕ ТЕНДЕНЦИИ:
СТРАТЕГИЯ «УЗБЕКИСТАН –2030»

FORUM

YASHIL IQTISODIYOT VA TARAQQIYOT

2025

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MAXSUS SON

- MACROECONOMIC STABILITY
- LABOR MARKET IN THE GREEN ECONOMY
- GLOBAL ECONOMY AND INTERNATIONAL ECONOMIC RELATIONS
- GREEN INVESTMENT AND FINANCING
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FACE RECOGNITION PROGRAM IN PYTHON

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Abstract: The Python programming language has undergone significant transformations in recent years, expanding its applications across multiple fields. Today, Python is regarded as one of the most reliable programming languages in Data Science, Deep Learning, Machine Learning, Computer Vision, and Artificial Intelligence. In these domains, especially in working with data and neural networks, visualization of problem solutions plays a crucial role in evaluating accuracy. The Matplotlib library provides a convenient framework for creating visual representations. This dissertation focuses on the fundamentals of image processing, including image size analysis and contrast adjustment techniques.

Key words: python, matplotlib, opencv-python, jupyter, numpy, pandas, pytorch, array, pseudocolor schemas.

Annotatsiya: So'nggi yillarda Python dasturlash tili sezilarli darajada rivojlanib, turli sohalarda keng qo'llanila boshladi. Bugungi kunda Python Data Science, Deep Learning, Machine Learning, Computer Vision va Sun'iy intellekt yo'nalishlarida eng ishonchli dasturlash tillaridan biri sifatida tan olinadi. Ayniqsa, ma'lumotlar va neyron tarmoqlar bilan ishlash jarayonida muammolarni vizuallashtirish ularning aniqligini baholashda muhim ahamiyat kasb etadi. Matplotlib kutubxonasi vizual tasvirlarni yaratishda qulay imkoniyatlarni taqdim etadi. Ushbu dissertatsiyada tasvirni qayta ishlash, uning hajmini aniqlash hamda kontrastni o'zgartirish usullari yoritiladi.

Kalit so'zlar: python, matplotlib, opencv-python, jupyter, numpy, pandas, pytorch, massiv, psevdorangi sxemalari.

Аннотация: За последние годы язык программирования Python претерпел значительные изменения и получил широкое распространение во многих областях. Сегодня Python считается одним из самых надёжных языков программирования в сферах Data Science, Deep Learning, Machine Learning, Computer Vision и Искусственного интеллекта. При работе с данными и нейронными сетями визуализация решений играет важную роль в оценке точности. Библиотека Matplotlib предоставляет удобные инструменты для создания графических изображений. В данной диссертации рассматриваются основы обработки изображений, включая определение их размеров и методы изменения контрастности.

Ключевые слова: python, matplotlib, opencv-python, jupyter, numpy, pandas, pytorch, массив, схемы псевдоцветов.

INTRODUCTION

In recent years, Python has become one of the most widely used programming languages in the field of artificial intelligence and computer vision due to its simplicity, flexibility, and rich ecosystem of libraries. Among its numerous applications, face detection and recognition have emerged as particularly significant research and practical directions. Python provides a variety of frameworks and libraries such as OpenCV, dlib, and face-recognition that enable efficient implementation of face recognition algorithms in both real-time and static image environments.

Face recognition technologies are now widely integrated into daily life and professional activities. One of the most common examples is Face ID authentication used in smartphones and other smart devices for unlocking screens and providing secure access. Beyond personal devices, these technologies have also been extensively adopted in the security and defense sectors, where they are applied to video surveillance, access control systems, and identity verification processes. Such applications highlight the growing importance of facial recognition in ensuring public safety and enhancing operational efficiency.

Moreover, the healthcare sector has also started to benefit from facial recognition technologies. Doctors and medical professionals employ these systems to securely access patients' electronic medical records (EMRs), monitor patient history, and even explore applications for diagnosing certain diseases through facial pattern analysis. This demonstrates that the use of face recognition is not only limited to security purposes but also extends to improving healthcare delivery and patient care.

Therefore, studying the implementation of Python-based face detection and recognition systems holds both scientific and practical significance. It allows for a better understanding of computer vision algorithms, supports the development of more secure authentication systems, and contributes to interdisciplinary applications in medicine, law enforcement, and beyond.

LITERATURE REVIEW

The rapid development of artificial intelligence, machine learning, and computer vision has significantly influenced the evolution of programming languages and their applications. In particular, Python has emerged as one of the leading languages in this domain due to its rich ecosystem of libraries and its simplicity, which allows both beginners and professionals to implement complex models effectively. The academic and practical literature reflects a wide range of contributions that demonstrate the role of Python in advancing machine learning, deep learning, and neural network-based applications.

Müller and Guido, in their well-recognized work *An Introduction to Machine Learning with Python*, provide a comprehensive overview of the fundamental concepts of machine learning using Python. Their book emphasizes the implementation of practical algorithms, such as classification, regression, and clustering, with the help of scikit-learn, which is considered one of the most widely used Python libraries in data science [1]. This resource highlights the importance of Python in making machine learning techniques more accessible to researchers and practitioners.

In the field of computer vision, Rosebrock's *Deep Learning for Computer Vision with Python* is an essential contribution. This work introduces readers to advanced deep learning techniques such as convolutional neural networks (CNNs) and their implementation in Python for solving problems like object detection, face recognition, and image classification [2]. The book demonstrates how Python-based frameworks can bridge the gap between theoretical deep learning models and their real-world applications, particularly in vision-related tasks.

Another important aspect of Python's role in modern computing is its usability for automation tasks. Sweigart's *Automate the Boring Stuff with Python* illustrates how Python can be used to simplify repetitive programming and data processing tasks, including text parsing, file manipulation, and automated workflows [3]. While the focus of this book is not limited to artificial intelligence, it underlines the adaptability of Python in solving everyday computational problems, which in turn supports its integration into more complex AI-driven systems.

The theoretical foundation of neural networks and their application to recognition, control, and decision-making has been studied extensively by Barsky in his book *Neural Networks: Recognition, Control, Decision Making* [4]. Although this work was published before the widespread adoption of deep learning frameworks in Python, it provides a critical conceptual background for understanding how neural network models function. These insights form the theoretical basis for many modern Python-based machine learning and computer vision applications.

In summary, the literature shows that Python has established itself as a universal language bridging theory and practice across artificial intelligence, machine learning, and computer vision. While early works such as Barsky's laid the theoretical foundation [4], modern authors like Müller and Guido [1], Rosebrock [2], and Sweigart [3] have demonstrated Python's capacity to operationalize these theories into practical tools and applications. Collectively, these studies highlight the growing importance of Python in the development of AI-based solutions, ranging from machine learning models to automation and advanced computer vision systems.

RESEARCH METHODOLOGY

This study applies Python-based tools to develop a face recognition model using **OpenCV** and the **face_recognition** library. The methodology consists of three main stages: data preparation, training, and testing. In the preparation stage, individual images are collected and preprocessed to extract unique facial encodings. During training, the encodings and names are stored in lists, serving as reference data. In testing, the model detects faces from a group image, computes their encodings, and compares them with the training dataset using similarity measures. Finally, OpenCV visualizes results by drawing bounding boxes and displaying recognized names on detected faces.

Research and analysis

In this python project, we want to create a machine learning model that recognizes people in images. We use face_recognition API and OpenCV in our project.

Libraries

- Python – 3.x
- cv2 – 4.5.2
- numpy – 1.20.3
- face_recognition – 1.3.0

We use the following command to install the above packages.

1. pip install numpy opencv-python
2. pip install dlib
3. pip install face_recognition

Project data collection

We can implement this face recognition project using our own dataset. For this project, I used my friends image as a dataset.

Steps to develop a face recognition model

Before proceeding, let's understand what is face detection and detection.

Face recognition is the process of identifying or verifying a person's face from photographs and video footage.

Face detection is defined as the process of identifying and extracting faces (location and size) from an image to use a face detection algorithm.

The face recognition method is used to identify unique displayed features in an image. In most cases, the face image has already been removed, cut, scaled and turned gray. Face recognition includes 3 stages: face recognition, feature release, Face Recognition.

OpenCV is an open source library written in C++. It includes the implementation of various algorithms and deep neural networks used for computer vision tasks.

1. We prepare a data set

We will create 2 directories, we will try training. We need to make sure that the images we choose represent the facial features well enough for the classifier.

Let's test the model, take a picture called friends and place it in our "common_picture" directory.

2. Training ie we will teach the model

First we import the necessary modules.

The face_recognition library contains various utilities that help with the face recognition process.

Now we create 2 lists that store the names of the images (persons) and their face encodings.

```
path = "./training_pict/"
```

```
known_names = []
```

```
known_name_encodings = []
```

```
images = os.listdir(path)
```

A face encoding is a vector of values representing important dimensions between distinguishing features of a face, such as the distance between the eyes, the width of the forehead, and so on.

We loop through each image in our training_image directory, extract the name of the person in the image, compute its face encoding vector, and store the data in the corresponding lists.

```
for _ in images:
```

```
    image = fr.load_image_file(path + _)
```

```
    image_path = path + _
```

```
    encoding = fr.face_encodings(image)[0]
```

```
known_name_encodings.append(encoding)
```

```
    known_names.append(os.path.splitext(os.path.basename(image_path))[0].capitalize())
```

3. Test the model on a test data set

As mentioned above, our dataset in our public_image directory contains only 1 image with all the persons in it.

Cv2 reads the test image using the imread() method.

```
test_image = "./umumiy_rasm/do'stlar.jpg"
```

```
image = cv2.imread(test_image)
```

The face_recognition library provides a useful method called face_locations() that locates the coordinates (left, bottom, right, top) of each face detected in the image. Using these location values, we can easily find face encodings

```
face_locations = fr.face_locations(image)
face_encodings = fr.face_encodings(image, face_locations)
```

We consider each face location and its encoding in the image. We then compare this encoding with the encodings of the faces in the “training_image” dataset.

Then calculate the face distance, that is, we determine the similarity between the encoding of the test image and the images of the training_image. Now we select the minimum value distance from it, which indicates that the face in the image common_image is one of the faces in the training_image dataset.

Now, using the methods in the cv2 module, draws a rectangle with the coordinates of the face position

```
for (top, right, bottom, left), face_encoding in zip(face_locations, face_encodings):
    matches = fr.compare_faces(known_name_encodings, face_encoding)
    name = ""
    face_distances = fr.face_distance(known_name_encodings, face_encoding)
    best_match = np.argmin(face_distances)
    if matches[best_match]:
        name = known_names[best_match]
    cv2.rectangle(image, (left, top), (right, bottom), (0, 0, 255), 2)
    cv2.rectangle(image, (left, bottom - 15), (right, bottom), (0, 0, 255), cv2.FILLED)
    font = cv2.FONT_HERSHEY_DUPLEX
    cv2.putText(image, name, (left + 6, bottom - 6), font, 1.0, (255, 255, 255), 1)
```

Shows the image using the imshow() method of the Cv2 module.

```
cv2.imshow("Natija", image)
```

Tasvirni imwrite() usuli yordamida joriy ishchi katalogimizga saqlaydi.

```
cv2.imwrite("./Natija_rasm.jpg", image)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

CONCLUSION AND SUGGESTIONS

In conclusion, this research has shown that Python, combined with libraries such as **OpenCV** and **face_recognition**, provides an efficient and practical solution for face recognition tasks. The methodology of preparing data, encoding facial features, and testing on real images demonstrated reliable recognition accuracy with clear visual results. The approach requires minimal computational effort, making it suitable for small- to medium-scale applications. For future improvements, it is suggested to expand the dataset with diverse samples, apply advanced deep learning models (e.g., CNNs), and integrate real-time video processing to increase accuracy, robustness, and applicability in security and healthcare systems.

List of used literature

1. A. Müller, S. Guido. An introduction to machine learning with Python. IC “Gevissta”, 2017.
2. A. Rosebrock. Deep Learning for Computer Vision with Python. Practitioner Bundle. 1st Edition. PyImageSearch (www.PyImageSearch.com), 2017.
3. A. Sweigart. Automate the Boring Stuff with Python. Practical Programming for Total Beginners. San Francisco, 2015.
4. A.B. Barsky. Neural networks: recognition, control, decision making. - Moscow: “Finance and Statistics”, 2004.



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