



A MATLAB based Face Recognition using PCA with Back Propagation Neural network

Priyanka Dhoke¹, M.P. Parsai²

Dept. of Electronics and Communication, Jabalpur Engineering College, Jabalpur (M.P.), India¹

Professor, Dept. of Electronics and Communication, Jabalpur Engineering College, Jabalpur (M.P.), India²

ABSTRACT: Automatic recognition of people is a challenging problem which has received much attention during recent years due to its many applications in different fields. Face recognition is one of those challenging problems and up to date, there is no technique that provides a robust solution to all situations. There are many techniques used for this purpose. Face recognition is an effective means of authenticating a person. In this paper, a face recognition system for personal identification and verification using Principal Component Analysis (PCA) with Back Propagation Neural Networks (BPNN) is proposed. The dimensionality of face image is reduced by the PCA and the recognition is done by the BPNN for face recognition. The system consists of a database of a set of facial patterns for each individual. The characteristic features of pca called 'eigenfaces' are extracted from the stored images, which is combine with Back Propagation Neural Network for subsequent recognition of new images.

KEYWORDS: Neural Networks, Principal Component Analysis, Eigen Values, Eigen Vector, Back Propagation Neural Network

I. INTRODUCTION

Face recognition has a large number of applications, including security, person verification, Internet communication, and computer entertainment. Although research in automatic face recognition has been conducted since the 1960s, this problem is still largely unsolved. Recent years have seen significant progress in this area owing to advances in face modelling and analysis techniques. Systems have been developed for face detection and tracking, but reliable face recognition still offers a great challenge to computer vision and pattern recognition researchers. There are several reasons for recent increased interest in face recognition, including rising public concern for security, the need for identity verification in the digital world, and the need for face analysis and modelling techniques in multimedia data management and computer entertainment. Recent advances in automated face analysis, pattern recognition, and machine learning have made it possible to develop automatic face recognition systems to address these applications. In this paper we proposed a mathematical model and computational model of face recognition which is fast, reasonably simple, and accurate in constrained environment. Face recognition using eigenface has been shown to be accurate and fast. When BPNN technique is combine with PCA non-linear face images can be recognised easily. [1][5]

II. WORKING MODEL

The system involves three steps (Fig1):

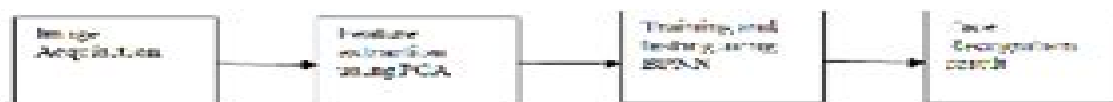


Fig1: Generic representation of a face recognition system

Face Recognition Using Backpropagation Neural Network In Matlab Code

Peipei Pang



Face Recognition Using Backpropagation Neural Network In Matlab Code:

Embark on a transformative journey with Written by is captivating work, Discover the Magic in **Face Recognition Using Backpropagation Neural Network In Matlab Code** . This enlightening ebook, available for download in a convenient PDF format PDF Size: , invites you to explore a world of boundless knowledge. Unleash your intellectual curiosity and discover the power of words as you dive into this riveting creation. Download now and elevate your reading experience to new heights .

<https://staging.conocer.cide.edu/data/publication/Documents/Hp%20Officejet%20Pro%20K550%20Manual.pdf>

Table of Contents Face Recognition Using Backpropagation Neural Network In Matlab Code

1. Understanding the eBook Face Recognition Using Backpropagation Neural Network In Matlab Code
 - The Rise of Digital Reading Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Advantages of eBooks Over Traditional Books
2. Identifying Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Face Recognition Using Backpropagation Neural Network In Matlab Code
 - User-Friendly Interface
4. Exploring eBook Recommendations from Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Personalized Recommendations
 - Face Recognition Using Backpropagation Neural Network In Matlab Code User Reviews and Ratings
 - Face Recognition Using Backpropagation Neural Network In Matlab Code and Bestseller Lists
5. Accessing Face Recognition Using Backpropagation Neural Network In Matlab Code Free and Paid eBooks
 - Face Recognition Using Backpropagation Neural Network In Matlab Code Public Domain eBooks
 - Face Recognition Using Backpropagation Neural Network In Matlab Code eBook Subscription Services
 - Face Recognition Using Backpropagation Neural Network In Matlab Code Budget-Friendly Options

6. Navigating Face Recognition Using Backpropagation Neural Network In Matlab Code eBook Formats
 - ePub, PDF, MOBI, and More
 - Face Recognition Using Backpropagation Neural Network In Matlab Code Compatibility with Devices
 - Face Recognition Using Backpropagation Neural Network In Matlab Code Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Highlighting and Note-Taking Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Interactive Elements Face Recognition Using Backpropagation Neural Network In Matlab Code
8. Staying Engaged with Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Face Recognition Using Backpropagation Neural Network In Matlab Code
9. Balancing eBooks and Physical Books Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Face Recognition Using Backpropagation Neural Network In Matlab Code
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Setting Reading Goals Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Fact-Checking eBook Content of Face Recognition Using Backpropagation Neural Network In Matlab Code
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
 - Integration of Multimedia Elements

- Interactive and Gamified eBooks

Face Recognition Using Backpropagation Neural Network In Matlab Code Introduction

In the digital age, access to information has become easier than ever before. The ability to download Face Recognition Using Backpropagation Neural Network In Matlab Code has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Face Recognition Using Backpropagation Neural Network In Matlab Code has opened up a world of possibilities. Downloading Face Recognition Using Backpropagation Neural Network In Matlab Code provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Face Recognition Using Backpropagation Neural Network In Matlab Code has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Face Recognition Using Backpropagation Neural Network In Matlab Code. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Face Recognition Using Backpropagation Neural Network In Matlab Code. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Face Recognition Using Backpropagation Neural Network In Matlab Code, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Face Recognition Using Backpropagation Neural Network In Matlab Code has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a

popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Face Recognition Using Backpropagation Neural Network In Matlab Code Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Face Recognition Using Backpropagation Neural Network In Matlab Code is one of the best book in our library for free trial. We provide copy of Face Recognition Using Backpropagation Neural Network In Matlab Code in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Face Recognition Using Backpropagation Neural Network In Matlab Code. Where to download Face Recognition Using Backpropagation Neural Network In Matlab Code online for free? Are you looking for Face Recognition Using Backpropagation Neural Network In Matlab Code PDF? This is definitely going to save you time and cash in something you should think about.

Find Face Recognition Using Backpropagation Neural Network In Matlab Code :

hp officejet pro k550 manual

hp pavillion dv4 repair manual

hp ipaq 310 user manual

hp manual j4680

~~hp j5780 manual~~

hp elitebook 2560p service manual

hp laserjet 52troubleshooting guide

hp j4680 user manual

[hp en fc c300a desktops owners manual](#)

hp officejet h470 manual

[hp laserjet m1120 manual](#)

[hp pavilion laptop keyboard repair](#)

[hp mini 210 2190 laptops owners manual](#)

[hp laserjet 4250 printer service manual](#)

hp hw6945 cell phones owners manual

Face Recognition Using Backpropagation Neural Network In Matlab Code :

Introduction to Dive Master Course This program introduces you to the concepts, skills, and knowledge necessary to join the ranks of PADI Professionals worldwide. Start now for free! Dive Master PDF | PDF | Scuba Diving | Underwater Sports 25/4/2015 Divemaster. PADI Divemaster Manual Knowledge Reviews Knowledge Reviews Section 1 - The Role & Characteristics of the PADI Divemaster PADI Instructor Manual 2020 In early February, as a benefit of your PADI® Membership, download the 2020 edition of the PADI Instructor Manual along with the errata document from the ... PADI-Divemaster-Manual (pdf) Oct 17, 2023 — Communications document from Webster University, 36 pages, PADI Divemaster Manual PADI DIVEMASTER course Index <https://www.thomas-n-ruth.com> ... Free Scuba Manuals & More My wife and I have a large collection of free downloadable PDF documents of scuba manuals for both divers and instructors including PADI, NASE, ESA, NSI... PADI Divemaster Manual by Alex Brylske PADI Divemaster Manual. Alex Brylske, Tonya Palazzi (Editor), Mary E. Beveridge (Editor) ...more ... Download app for Android. © 2023 Goodreads, Inc. Padi Divemaster Manual Pdf Take the PADI Divemaster course and do what you love to do as a career. Scuba divers look up to divemasters because they are leaders who mentor and motivate ... Instructor Manual - PADI IDC Koh Tao Thailand Download the most current forms from padi.com/Pros' Site. Check with your ... Knowledge Reviews in the PADI Divemaster Manual or through Divemaster Online, and ... Free Digital PADI Instructor Manual To download the PADI Instructor Manual, visit the PADI Pros' Site and select 'Training Essentials > Digital Instructor Manual'. manual. You can then choose ... Required Books - American Pro Diving Center All training materials for courses leading up to PADI Divemaster level including manuals, videos, and multimedia products for the PADI Open Water Diver course,. SERVICE MANUAL - International® Trucks Feb 1, 2006 — ELECTRICAL CIRCUIT DIAGRAM. U00JAHP. CIRCUIT DIAGRAM INSTRUCTIONS ... LCF CIRCUIT DIAGRAMS. 59053V. AE08-55411. CHAPTER 2. -. -. -. -. -. 12. 2008 Ford LCF Low Cab Forward Truck Electrical ... - eBay 2008 Ford Low Cab Forward (LCF)

Truck Electrical Wiring Diagrams. Covering all LCF Trucks Including LCF-L45, LCF-L55, LCF-C450 & LCF-C550 | 450 & 550 Series ... SERVICE MANUAL - International® Trucks RELAY FUNCTION AND WIRING GUIDE, P. 8. DRAWN. PART NO. DATE. INTERNATIONAL TRUCK AND ... CIRCUIT DIAGRAM, LCF. CNA1. 28AUG07. INITIAL RELEASE. A. 60785Z. I have a 2006 Ford LCF. I have a 374DTC and would like Aug 5, 2021 — I have a 2006 Ford LCF. I have a 374DTC and would like to have the diagram for the fuel relay system - Answered by a verified Ford Mechanic. 2008 Ford LCF Low Cab Forward Truck Electrical ... 2008 Ford Low Cab Forward (LCF) Truck Electrical Wiring Diagrams - Covering all LCF Models Including LCF-L45, LCF-L55, LCF-C450 & LCF-C550 -450 & 550 Series ... 2006 Ford LCF Low Cab Forward Truck Electrical ... 2006 Ford Low Cab Forward Truck Electrical Wiring Diagrams... LCF-45, LCF-55, L45, L55, 450 & 550 Series 4.5L V6 Power Stroke Diesel... Ford Motor Company. 2006 Ford LCF no brake lights - Ford Truck Enthusiasts Forums Aug 27, 2021 — I can't seem to find a wiring diagram online anywhere. I did buy a Ford wiring book but I don't really have a week to wait for it to get here. Ford LCF (Low cab forward) (2006 - 2009) - fuse box diagram Jul 3, 2018 — Ford LCF (Low cab forward) (2006 - 2009) - fuse box diagram. Year of production: 2006, 2007, 2008, 2009. Power distribution. 2007 ford lcf no power to starter - Yellow Bullet Forums Mar 30, 2013 — I'm no help with the wire diagram, but I just want to say the I've seen the fuse box or central junction box or what ever they call it in the ... School Law and the Public Schools, 4th Edition This is an essential text for educators and policy makers at all levels. It is practical, easy to read, and contains relevant information on historical and ... School Law and the Public Schools: ... - AbeBooks Synopsis: This is an essential text for educators and policy makers at all levels. It is practical, easy to read, and contains relevant information on ... A Practical Guide for Educational Leaders 4TH ... School Law & the Public Schools : A Practical Guide for Educational Leaders 4TH EDITION [AA] on Amazon.com. *FREE* shipping on qualifying offers. School Law and the Public Schools, 4th Edition - Softcover This is an essential text for educators and policy makers at all levels. It is practical, easy to read, and contains relevant information on historical and ... School Law and the Public Schools, 4th Edition School Law and the Public Schools 4th Edition. School Law and the Public Schools : a Practical Guide for Educational Leaders. Revised. number of pages: 400 ... School law and the public schools : a practical guide for ... School law and the public schools : a practical guide for educational leaders. Responsibility: Nathan L. Essex. Edition: 4th ed. Imprint: Boston : Pearson/Allyn ... School law and the public schools : a practical guide for ... School law and the public schools : a practical guide for educational leaders ; Author: Nathan L. Essex ; Edition: 4th ed View all formats and editions ; Publisher ... School Law and the Public Schools : A Practical Guide for ... School Law and the Public Schools : A Practical Guide for Educational Leaders by Nathan L. Essex (2007, Perfect, Revised edition). ERIC - ED464418 - School Law and the Public Schools by NL Essex · 2002 · Cited by 258 — The goal of this book is to provide comprehensive and practical knowledge of relevant legal issues that affect the administration of public schools. School Law and the Public Schools: A Practical ... School Law and the Public Schools: A Practical Guide for Educational Leaders (The Pearson

Educational Leadership Series). 4.3 Rate this book.