

AI Face Detection System

Complete Setup Guide for Beginners

1. Introduction

Welcome! This guide will help you run the AI Face Detection System.

No prior technical experience required - just follow along!

The system detects faces in real-time using your webcam and identifies:

- Age (approximate range)
- Gender
- Confidence level

2. What You Need

OPTION A (Easiest - Recommended): Use Replit

- ' Just a web browser and internet connection
- ' Free account at replit.com
- ' No installation needed!

OPTION B (Advanced): Run on Your Computer

- ' Node.js version 18+ (download from nodejs.org)
- ' A webcam for face detection
- ' 1 GB free disk space

3. Quick Start on Replit (Recommended)

Step 1: Create Replit Account

- ! Go to replit.com
- ! Click "Sign up" and create a free account

Step 2: Create New Repl

- ! Click "+ Create Repl" button (top left)
- ! Select "Import from GitHub"

Step 3: Upload Your Project

- ! Upload or drag and drop your project folder

Step 4: Run the Project

- ! Click the green "Run" button
- ! Wait 1-2 minutes for installation

Step 5: Access Your App

- ! App opens in preview window
- ! Allow camera permissions when prompted
- ! Your system is now running!

4. Running on Your Computer

STEP 1: Install Node.js

1. Go to <https://nodejs.org>
2. Download the LTS version
3. Run the installer with default settings
4. Restart your computer

STEP 2: Extract Project Files

1. Extract the ZIP file to a folder
Example: C:\Users\YourName\face-detection

STEP 3: Open Terminal/Command Prompt

Windows: Press Win+R, type "cmd", press Enter
Mac: Press Cmd+Space, type "terminal", press Enter

STEP 4: Navigate to Project

Type: `cd C:\Users\YourName\face-detection`
(Replace with your actual folder path)

Installation Steps

STEP 5: Install Main Dependencies

Type: `npm install`
Wait 2-5 minutes for installation

STEP 6: Install Frontend Dependencies

Type: `cd client`
Type: `npm install`
Type: `cd ..`

STEP 7: Start the Application

Type: `npm run dev`
Keep this window open!

STEP 8: Open in Browser

Open browser and go to: `http://localhost:5000`
Allow camera permissions when asked

5. Using the System

PUBLIC VIEW (No Login)

- Camera feed displays automatically
- Real-time face detection
- Age and gender shown on faces
- All data saved to database

ADMIN LOGIN

1. Click "Login" button (top-right)
2. Enter credentials:
Username: admin
Password: admin123
3. Click "Login"

LOGOUT

Click the X button in top-right corner

6. Troubleshooting

Camera Not Working:

- ' Allow camera permissions in browser
- ' Close other apps using camera
- ' Try refreshing the page

"npm not found" Error:

- ' Install Node.js from nodejs.org
- ' Restart your computer
- ' Open a NEW terminal window

Port Already in Use:

- ' Close apps using ports 3001 or 5000
- ' Restart your computer

Blank Screen:

- ' Wait 30 seconds for models to load
- ' Check camera permissions
- ' Clear browser cache

7. Important Security Notes

FOR PRODUCTION USE:

1. Change default password immediately!
Default: admin / admin123 is NOT secure
2. Use HTTPS for secure connections
3. Backup your database regularly
Database: server/detections.db
4. Camera Privacy
 - Users must approve camera access
 - Data stays in your database
 - No data sent to third parties

8. System Information

PORTS USED:

- Port 3001: Backend API server
- Port 5000: Frontend website

DATABASE:

- Location: server/detections.db
- Type: SQLite

DEFAULT ADMIN:

- Username: admin
- Password: admin123

SYSTEM REQUIREMENTS:

- Node.js 18+
- 1GB RAM minimum
- Webcam
- Modern browser (Chrome recommended)

Quick Command Reference

Install dependencies:

```
npm install  
cd client && npm install && cd ..
```

Start application:

```
npm run dev
```

Access application:

`http://localhost:5000`

Stop application:

`Ctrl+C` (in terminal)