VISIT Interactive Museum Application

Installation Guide for Museum Staff

Developed by Dineshkumar Rajendran

6 What You Received

- VISIT-Museum-App folder with your museum's license
- Complete application software
- Installation scripts
- This installation guide

System Requirements

- Computer: Windows 10/11 (64-bit)
- Python: Version 3.8 or higher (<u>Download here</u>)
- **RAM**: Minimum 4GB (8GB recommended)
- Camera: USB webcam or built-in camera
- Storage: At least 1GB free space
- Internet: Required for initial setup only

🚀 Installation Steps

Step 1: Install Python

- 1. Download Python from python.org
- 2. **IMPORTANT**: During installation, check these boxes:
 - 🔽 "Add Python to PATH"
 - 🔽 "Install pip"
- 3. Restart your computer after installation

Step 2: Extract VISIT Application

- 1. Extract the VISIT-Museum-App folder to your desired location
- 2. Recommended location: (C:\VISIT-Museum-App\)

Step 3: Run Automated Setup

- 1. Open the VISIT-Museum-App folder
- 2. Go to the (scripts) folder
- 3. **Right-click** on (setup_virtual_env.bat)
- 4. Select "Run as Administrator"
- 5. Wait for installation to complete (may take 5-10 minutes)

Step 4: Verify Installation

The setup script will automatically:

- Install all required packages
- **I** Test all components
- Verify your license

Running VISIT Application

Method 1: Quick Launch (Recommended)

- 1. Go to (scripts) folder
- 2. Double-click (run_visit_venv.bat)
- 3. The application will start automatically

Method 2: Manual Launch

- 1. Open Command Prompt
- 2. Navigate to VISIT folder:
 cd C:\VISIT-Museum-App
- 3. Activate environment:
 venv\Scripts\activate
- 4. Run application:
 cd app
 python visit_app.py

Using the Application

Dashboard Tab

- Start Camera: Begin visitor detection
- **Stop Camera**: Stop detection system
- **Test Mode**: Switch to testing interface
- Full Screen: Enter exhibition display mode

Media Configuration Tab

- 1. **Add Your Content**: Browse and select media files for each detection type:
 - Default: Plays when no visitors detected
 - Face Detection: Plays when visitor's face is detected
 - Eye Movement: Plays when eye movement detected
 - **Lip Movement**: Plays when visitor speaks
 - Hand Detection: Plays when hands/gestures detected
 - Approach/Recede: Plays when visitor moves closer/away
 - Pose Detection: Plays when body posture detected
 - Movement: Plays when general movement detected
- 2. **Save Configuration**: Always save your media setup
- 3. Load Configuration: Restore previous setups

Testing Mode Tab

- Live Preview: See camera feed with detection overlays
- **Test All Systems**: Verify all detections work
- Calibrate: Adjust sensitivity settings

Keyboard Shortcuts

- **F5**: Reset application
- **F6**: Refresh camera
- F11: Enter/exit full screen
- ESC: Exit full screen mode

🚞 Adding Your Media Content

Supported Formats

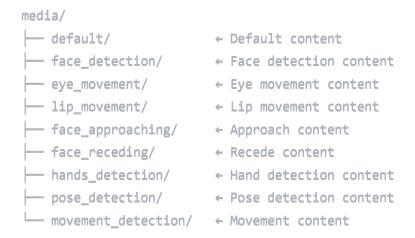
• Images: JPG, PNG, BMP, GIF

• Videos: MP4, AVI, MOV, MKV

• Audio: MP3, WAV, OGG

Media Organization

- 1. Navigate to (media) folder
- 2. Add files to appropriate subfolders:



Best Practices

- File Sizes: Keep videos under 100MB for smooth playback
- Naming: Use descriptive names (e.g., (welcome_face.mp4))
- Testing: Always test content before public display
- Backup: Keep backup copies of your configurations

🛕 Exhibition Setup

For Public Display

- 1. **Test Everything**: Use Testing Mode to verify all detections
- 2. **Configure Media**: Set up all your exhibition content
- 3. **Save Configuration**: Backup your settings
- 4. Full Screen Mode: Press F11 for public display
- 5. Position Camera: Ensure good lighting and clear view of visitor area

Optimal Setup

- **Lighting**: Even, adequate lighting (avoid backlighting)
- Camera Height: Position at visitor eye level
- **Distance**: 3-8 feet from interaction area
- **Background**: Contrasting background helps detection



Troubleshooting

Application Won't Start

- Check License: Ensure (license.key) is in the (app) folder
- **Reinstall**: Run (setup_virtual_env.bat) again
- **Python Issue**: Verify Python is installed correctly

Camera Issues

- **Permission**: Grant camera access to the application
- Other Apps: Close Skype, Teams, or other camera apps
- Refresh: Press F6 to refresh camera connection

Detection Not Working

- Lighting: Ensure adequate, even lighting
- **Distance**: Position visitors 3-8 feet from camera
- Reset: Press F5 to reset all systems
- Calibrate: Use calibration tools in Testing Mode

Media Not Playing

- Format: Check file formats are supported
- Size: Ensure files aren't too large
- Path: Verify files are in correct media folders
- **Test**: Use Testing Mode to verify playback

Performance Issues

- Close Apps: Close unnecessary programs
- Lower Quality: Use smaller video files
- **Restart**: Restart the application
- System: Ensure adequate RAM and CPU

Support

Technical Support

- **Developer**: Dineshkumar Rajendran
- Software: VISIT Interactive Museum App v1.0
- **License Issues**: Contact developer for license problems
- **Updates**: Check with developer for software updates

Self-Help

- 1. **Check Logs**: View (logs) folder for error details
- 2. **Restart**: Try restarting the application
- 3. Reinstall: Run setup script again if needed
- 4. **Documentation**: Review this guide thoroughly

License Information

- Your License: Valid for your museum only
- Expiry: Check your license expiry date
- **Renewal**: Contact developer before expiry
- Backup: Keep a backup copy of your license file

Important: Do not share your license file with other museums



Getting the Most from VISIT

Content Strategy

- Engaging Media: Use high-quality, engaging content
- Varied Responses: Different media for different interactions
- Regular Updates: Refresh content periodically
- Visitor Testing: Observe visitor interactions and adjust

Exhibition Integration

- Theme Alignment: Match content to your exhibition themes
- Multiple Setups: Create different configurations for different exhibitions
- Visitor Flow: Position to enhance, not disrupt, visitor experience
- Staff Training: Train staff on operation and troubleshooting

© 2025 Dineshkumar Rajendran. All rights reserved.

Thank you for choosing VISIT Interactive Museum Application!