





VISIT Interactive Museum Application

Installation Guide for Museum Staff

Developed by Dineshkumar Rajendran

What You Received



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

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

-  Create virtual environment
 -  Install all required packages
 -  Test all components
 -  Verify your license
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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`
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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
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Keyboard Shortcuts

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

```
media/
├── default/           ← Default content
├── face_detection/    ← Face detection content
├── eye_movement/      ← Eye movement content
├── lip_movement/      ← Lip movement content
├── face_approaching/  ← Approach content
├── face_receding/     ← Recede content
├── hands_detection/   ← Hand detection content
├── pose_detection/    ← Pose detection content
└── movement_detection/ ← Movement content
```

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
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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
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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
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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
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Thank you for choosing VISIT Interactive Museum Application!