## **Test Configuration Fixes**

## Issues Identified

- 1. The project was using Vitest for testing but trying to run tests with Jest
- 2. There was no Jest configuration file
- 3. There were TypeScript configuration issues with ESM modules
- 4. There were missing mock implementations for external dependencies

## **Changes Made**

- 1. Created a Jest configuration file (jest.config.js) with TypeScript support
- 2. Added a Jest setup file (jest.setup.js) with:
  - TextEncoder and TextDecoder polyfills
  - Global mocks for browser APIs
  - UUID mock implementation
- 3. Updated test files to use Jest instead of Vitest:
  - Replaced vi.fn() with jest.fn()
  - Replaced vi.spyOn() with jest.spyOn()
  - Replaced vi.clearAllMocks() with jest.clearAllMocks()
- 4. Created mock implementations for external dependencies:
  - @ffmpeg/ffmpeg
  - @techstark/opencv-js
  - uuid
- 5. Fixed ESM-related issues:
  - Updated imports to use ESM syntax
  - Configured Jest to handle ESM modules

## **Running Tests**

To run the tests, use the following command:

npm test

Note: Some tests may still fail due to implementation details, but the configuration issues have been fixed.