**Project name: SentiScribe: Multimodal Fusion for Sentiment Analysis**

**Project author(s): Jin Gao, Selena Zhang**

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| Package/Tool/Library | Visual Studio Code 1.89.1 |
| Machine and OS Version | Windows 10 Windows 11 Mac OS 14.1 |
| Availability | https://code.visualstudio.com/ |
| Usage | Code Editing, Terminal, Run Ipynb notebooks |
| Data Type of Input | N/A |
| Accuracy | N/A |
| Speed | Fast for editing |
| Out of the Box | √ |

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| Package/Tool/Library | Python 3.12.0 |
| Machine and OS Version | Windows 10 Windows 11 Mac OS 14.1 |
| Availability | https://www.python.org/downloads/release/python-3120/ |
| Usage | Code running environment |
| Data type of the input | N/A |
| Accuracy | N/A |
| Speed | N/A |
| Did it work out of the box? If not, what did you have to do to use it? | √ |

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| Package/Tool/Library | Hume 0.5.0 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Emotion and sentiment score prediction |
| Data Type of Input | Video: MP4, Audio: MP3, Text: txt |
| Accuracy | Accuracy: 48+ emotion scores output by latest machine learning models |
| Speed | Slow for API Calls, not enough for real time usage for 3 modalities detection simutaneously |
| Out of the Box | Requires installation; may need additional configuration depending on use case |

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| Package/Tool/Library | OpenAI Python Client 1.24.1 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Access to OpenAI's API in Python environment |
| Data Type of Input | HTTP requests including prompts and system messages |
| Accuracy | Depends on the prompt quality |
| Speed | Slow for ChatGPT-4 API |
| Out of the Box | Requires API key setup and configuration |

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| Package/Tool/Library | Python-dotenv 0.21.0 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Management of environment variables in Python |
| Data Type of Input | .env file containing environment variables |
| Accuracy | N/A |
| Speed | N/A |
| Out of the Box | Need manual configuration for .env files |

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| Package/Tool/Library | Pydub 0.25.1 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Audio manipulation and processing |
| Data Type of Input | Audio files |
| Accuracy | N/A, just convert file formats |
| Speed | Moderate speed |
| Out of the Box | Requires ffmpeg for full functionality |

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| Package/Tool/Library | FFmpeg 1.4 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Official website https://ffmpeg.org/ |
| Usage | Media file conversion and processing |
| Data Type of Input | Audio and video files |
| Accuracy | N/A Just convert file formts |
| Speed | Slow |
| Out of the Box | Requires installation with exe installer |

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| Package/Tool/Library | Moviepy 1.0.3 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Video editing and processing |
| Data Type of Input | Video files |
| Accuracy | N/A Just convert file formts |
| Speed | Slow |
| Out of the Box | Requires ffmpeg for full functionality |

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| Package/Tool/Library | WebVTT-py 0.4.6 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Handling and parsing WebVTT files |
| Data Type of Input | .vtt files |
| Accuracy | Requires VTT files in complete format |
| Speed | Fast, nearly real time |
| Out of the Box | √ |

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| Package/Tool/Library | OpenCV-python 4.9.0.80 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Image and video analysis and manipulation |
| Data Type of Input | Images and video streams |
| Accuracy | High for image and video processing tasks |
| Speed | Moderate slow for video frame capturing |
| Out of the Box | Need configuration |

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| Package/Tool/Library | pandas 2.2.2 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Data manipulation and analysis |
| Data Type of Input | CSV, Excel |
| Accuracy | N/A |
| Speed | Fast for our use case, nearly real time |
| Out of the Box | √ |

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| Package/Tool/Library | numpy 1.26.4 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Numerical computing |
| Data Type of Input | Arrays and matrices |
| Accuracy | Accurate |
| Speed | Fast, nearly real time |
| Out of the Box | √ |

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| Package/Tool/Library | matplotlib 3.8.4 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Plotting and visualization of data |
| Data Type of Input | Data from arrays, lists, or pandas DataFrames |
| Accuracy | N/A |
| Speed | Medium speed, can be slow for large dataset or high resolution drawing |
| Out of the Box | Advanced plotting style needs configuration |

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| Package/Tool/Library | scikit-learn 1.4.2 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via Python Package Index (PyPI) |
| Usage | Machine learning algorithms and tools |
| Data Type of Input | Numeric or categorical data, often in arrays or matrices |
| Accuracy | dependent on proper model tuning |
| Speed | Slow for model training |
| Out of the Box | √ |

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| Package/Tool/Library | Axios 1.6.8 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via CDN |
| Usage | Making HTTP requests from browser and Node.js |
| Data Type of Input | HTTP request configurations (URL, headers, params, etc.) |
| Accuracy | N/A |
| Speed | Slow, dependent on network conditions and server response |
| Out of the Box | Need HTTP request configurations |

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| Package/Tool/Library | Bootstrap 5.3.3 |
| Machine and OS Version | Windows 10, Windows 11, Mac OS 14.1 |
| Availability | Via CDN |
| Usage | Front-end framework for building responsive, mobile-first sites |
| Data Type of Input | HTML, CSS, and JavaScript for UI components |
| Accuracy | N/A |
| Speed | Fast for display contens |
| Out of the Box | Need configuraion by HTML pages |