# InfermonSAGA Dev Report

Zhang Jinrui\* jerryzhang40@gmail.com

20250124

#### Abstract

In this article, the development processes and plans are logged.

- 1 Main Goal
- 2 Roadmap
- 3 Dependencies

This section, the third-party dependencies will be logged and explained about how they are used in this specific project.

## 3.1 GLAD

The glad is used for the version that support the multiple-window graphics. The configuration for this dependence is according to [1, gladMultiwinMx]. We need to do this once in the top CMakeLists.txt.

```
set(GLAD_SOURCES_DIR "${PROJECT_SOURCE_DIR}/glad")
add_subdirectory("${GLAD_SOURCES_DIR}/cmake" glad_cmake)
glad_add_library(glad REPRODUCIBLE MX API gl:core=4.3)
```

Remember to include glad right before glfw as follow.

```
#include <glad/gl.h>
#include <GLFW/glfw3.h>
```

<sup>\*</sup>alternative email:zhangjr1022@mails.jlu.edu.cn

### **3.2** GLFW

The main graphics dependencies is glfw3. I used its sources code form its Github repository.

And Simply use this two line in CMakeLists.txt is okay.

```
add_subdirectory(glfw)
include_directories(glfw/include)
```

Then include GLFW in the file use it.

```
#include <GLFW/glfw3.h>
```

#### 3.3 IMGUI

I choose to use the maximum features of the imgui, which contains "docking" and "Multi Viewports"

To set up imgui with the glad and glfw is according to [2, setupImgui]. To set up imgui with "Multi Viewports" feature is according to [3, text].

# References

- [1] https://github.com/Dav1dde. glad multiwin mx. https://github.com/Dav1dde/glad/tree/glad2/example/c++/multiwin\_mx. Accessed: 2025-01-24.
- [2] https://github.com/Dav1dde. imgui for glfw opengl. https://github.com/ocornut/imgui/wiki/Getting-Started# example-if-you-are-using-glfw--openglwebgl. Accessed: 2025-01-24.
- [3] https://github.com/ocornut.imgui multi viewports. https://github.com/ocornut/imgui/wiki/Multi-Viewports. Accessed: 2025-01-24.