

What Programming Language will be used?

Below are some potential languages that can be used with pros and cons to each

Python

Pros

- easy to learn and start with
- Has libraries that are implemented in C++ and C
- Has many machine learning and artificial intelligence libraries

Cons

- has performance limits
- memory management

C/C++

Pros

- Performance (great speed for analyzing large datasets)
- low level language
- can manipulate algorithms and manage memory resources at a granular level

Cons

- Even with performance, has more sophisticated use cases
- not great for quick prototyping

JavaScript

Pros

- good for web applications for machine learning
- easy to learn

Cons

- low performance for labor-intensive tasks

- has some common libraries available for AI and ML

For this project we will be using Python. The main reason is that it's very simple to learn and use, it has many popular libraries and is efficient enough for our use case. We will not be using C/C++ because python already has libraries that are based on C/C++ to enhance speed. C/C++ are also for more sophisticated use cases that aren't necessarily what we're doing. Javascript won't be used because it's very similar to Python and Python is much easier to work with.