Binh's Neural Network Progress Report

Brief

The project's official title is **"Neural Network Proof of Concept in Mathematical Function Approximation"**. However, this is too long, therefore it will be called **"Binh's Neural Network"** from this point on in any other documentations of the project.

Progress

The project is in its **Finished** state. You can find the documentation inside **/docs/** directory in the project root.

Compared to the previous Progress Report, the program comes with these improvements:

- **Better Documentation**: updated documentation.
- **Included input validation**: Prohibits users from entering invalid data types.
- **Colors**: Colorful outputs, errors comes with red, banners comes with style.
- **Reduced usage of standard libraries**: Deleted usage of vector.h in Neural Network.
- **Improved Memory Safety**: Re-implement deconstructor of Matrix and Neural Network. Use dynamic allocation of Neural Network in Controller.

Documentation

You can find the documentation inside **/docs/** directory in the project root.

In there, you can find the information on how to run the program. But not to waste your time, this is how the project should be run.

```
# Run these scripts in the project root
# These scripts are written by me to automate the process

# To run the project (Project must be built first)
./run.sh

# To build the project (without running it)
./build.sh

# To build the project, then run it
./build_and_run.sh
```

I packaged the project with the build already, so you can just run it from the **"run.sh"** script. However, I reccomend running **"build_and_run.sh"** just as a precaution.