Demo Project: Moog Ladder Filter

Introduction

The purpose of the project was to become familiar with the saturating resonant filter, which is often used in music production. The task at hand was to create a biquad filter with nonlinear elements and explore the effects of different topologies and non-linearities, particularly on stability and coloration. The implementation was successfully accomplished in MATLAB, and satisfactory results were achieved, in terms of various colorations.

Background

Here, provide some background information necessary to understand the project. This may include theoretical foundations, previous work in the field, or any other context that sets the stage for your project.

Implementations

Detail your implementations in this section. Describe the methodology, tools, technologies, and processes you used in the project. Include any challenges you faced and how you overcame them.

Experiments and Results

This section should detail the experiments you conducted and the results you obtained. Include data, figures, and any other relevant information that demonstrates the outcomes of your project. Discuss any patterns, anomalies, or insights gleaned from your experiments.

Individual Contributions

Outline the individual contributions of each student to the overall project. This section ensures clarity on who was responsible for each part of the project and acknowledges each student's efforts.

Conclusion

Conclude your report by summarizing the main findings, the significance of your work, and any potential future work. Reflect on the project's success and any lessons learned.

References

Appendix