## WEST UNIVERSITY OF TIMIŞOARA FACULTY OF MATHEMATICS AND INFORMATICS DEPARTMENT OF COMPUTER SCIENCE



## SIMPLE API FOR 3D APPLICATIONS

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#### Abstract

The application programming interface which I will present in this thesis, alongside implementation related concepts, is actually a library packed with a couple of graphical effects based on particle systems. The thesis is composed out of four chapters, the content of each chapter is shortly described bellow.

In the first chapter, the *Introduction*, I give a brief history of computer graphics and introduce particle systems.

In the *Particle Systems* chapter I describe very thoroughly what particle systems are and how they are implemented in a graphical application.

The Application chapter presents all the particle based effects which I implemented and gives implementation details about them. It also gives details about the structure of the API and that of the application which uses the API, besides this it demonstrates the API's use with a couple of screen-shots.

Very few software pieces are perfect at their first implementation. In the *Conclusion* chapter I emphasize some changes which can be made in order to improve the performance of the API give some ideas about other graphical effects which can be added to the API in order to extend it.

#### Abstract

Abstract in Romanian.

#### Chapter 1

#### Introduction

This part will go in the abstract...

The application programming interface which I will describe in this thesis relies heavily on computer graphics because it is actually a small library which offers its users a couple of graphical effects based on particle systems. But before I start talking about it I need to set the background a little and

# Chapter 2 Particle Systems

This is the particle systems chapter.

# Chapter 3 Application

This is the application chapter.

### Chapter 4

### Conclusion

This is the conclusions chapter.