**题目**

|  |  |  |  |
| --- | --- | --- | --- |
| 学 院 | 计算机学院 | | |
| 专 业：  姓 名：  指导老师： | 数字媒体技术 | | |
|  | 学 号：  职 称： |  |
|  |  |

中国·珠海

二○二一 年 五 月

**诚信承诺书**

**本人郑重承诺：**本人承诺呈交的毕业设计《XXXXXXXXXXXXXX》是在指导教师的指导下，独立开展研究取得的成果，文中引用他人的观点和材料，均在文后按顺序列出其参考文献，设计使用的数据真实可靠。

本人签名：

日期： 年 月 日

**中文题目**

**摘 要**

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX*（概括本次毕业设计作品的主要内容，设计过程，制作的技术要点，所遇到的困难及解决方法等，不少于200汉字。）*

**关键词：**XXXX；XXXX；XXXX；XXXX*（要求3～5个最能表达主要内容的词作为关键词，中间用分号隔开）*

**英文题目**

**Abstract**

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX. *（英文摘要不少于200个单词）*

**Keywords:**  XXXX；XXXX；XXXX；XXXX*（英文关键词）*

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# 1 前言*（注：每一章都重开一页开头）*

Rougelike游戏[[1]](#footnote-1)（参考《注释标注方法》）是一种让玩家沉浸在满足好奇心和好胜心的快感中的游戏，不断的通过获得新的道具，装备，技能等让玩家感受到即时的奖励反馈。通过道具技能配合，游戏性等因素，让玩家沉浸其中。

次世代美术流程往往与Rougelike游戏看似不相匹配，长制作周期、质量要求等让许多独立开发者望而却步。我们将讨论如何在次时代美术流程中，既增强游戏画面，又充实游戏美术内容的方法。通过探讨最快速的次世代模型制作流程，研究如何在可视化的shader编辑器中进行材质多样化制作，将制作门槛降低，提升制作效率。

1.1 本设计的目的及意义

Rougelike游戏是一种随机的艺术，是对人类好奇心的深入探究。玩家会希望不断获得新的道具以获得不同的游戏体验，面对不同的怪物，不断挑战，是目前独立游戏制作的主流。但rougelike类型游戏画面主要以像素画为主，因为三维开发成本过高，制作周期较长。但已经有游戏《雨中冒险2》（图1.1）在三维的rougelike游戏方面取得进展，证明了rougelike在三维世界中的可行性。………..



图1.1.1 三维下的rougelike游戏：《雨中冒险2》

*注：图片命名方式以本节为开头，依次按序号排列，如本节图片命名为1.1.1 1.1.2等等*

*下一节的图片为1.2.1 1.2.2依次类推*

1.2 本设计在国内外的发展状况及存在的问题

据报告《2019 Free Global Games Market Report》 [1] (《参考文献标注方法》)显示，主机市场占比为全球游戏市场的32%，该数据证明了主机游戏在全球范围内发展情况良好，而根据伽马数据发布《2019中国游戏产业年度报告》[2]显示，主机游戏在全国游戏市场占比约为2.3%左右，2019年，中国单机游戏市场实际销售收入大幅上涨达到6.4亿元，同比增长341.4%。这组数据显示了我国主机市场的劣势，但也同时预示了中国单机市场的复兴。因此，我国主要的次时代游戏制作目前虽然大部分为对外输出，即外包形式，但在未来，由于单机市场的复兴，对于次时代游戏美术技术的需求会越来越多，玩家对于游戏画面的追求也会更进一步。………..

1.3 本设计应解决的主要问题

*（介绍本设计将要解决的主要难题，及解决方案或技术路线）*

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2 前期策划及美术设计*（注：每一章都重开一页开头）*

*（概括说明一下本章的主要内容，开始制作前做了哪些策划工作，完成那些主要部分的美术设计，以及这些都怎样影响到后面的工序）*…….

2.1 剧本构思

*（毕设主题的立意主题灵感来源再到故事梗概到剧本构思；剧本特点、写作注意问题）*

2.2 分镜设计

*（视听语言相关理论、镜头剪辑、转场技巧等）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX……

2.3 角色设计稿

*（参考前期角色说明书、人体比例、风格、配饰、五视图；角色设计应考虑的综合要素等）*

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2.4 场景设计稿

*（场景设计中风格参考、场景与角色比例关系、主场景确定、道具；场景设计的特性。）*

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3模型材质制作*（注：每一章都重开一页开头）*

*（阐述模型创作的生产流程，分析在本次创作中采用什么流程，并对该制作流程进行相应的说明。）*

3.1模型制作流程

*（先介绍基本原理，然后展开分步骤说明本设计中相关制作内容，具体某个角色和典型的场景进行分析即可）*

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3.2拓扑、UV以及贴图烘焙

*（布线规则、UV拆解和布局，烘焙贴图的参数）*

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3.3 PBR材质制作流程

*（PBR的概念以及应用）*

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3.4 贴图绘制

*（先介绍基本原理，然后展开分步骤说明本设计中相关制作内容，再具体介绍某个典型的模型贴图制作步骤）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX……

4 动画制作*（注：每一章都重开一页开头）*

*（运动规律（追随运动、动画的时间与空间、重叠运动等）在个人作品制作过程中的运用，如何让自己的角色表演方式更加流程、节奏感更加明显。）*

4.1动画运动规律

*（本次创作主要运用的运动规律）*

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[4.2角色](#_Toc7985488)绑定设置

*（先介绍骨骼绑定的基本原理，然后分步骤说明本设计中角色绑定的相关制作内容）*

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**[4.3动画制作](#_Toc7985488)**

*[（结合分镜进行动作设计，动画制作三个阶段，blocking、break down、polish）](#_Toc7985488)*

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4.4 表情制作

*（先介绍表情制作的基本原理，然后分步骤说明本设计中表情制作的相关内容）*

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5 灯光渲染制作*（注：每一章都重开一页开头）*

*（照明的基础理论知识，灯光对故事情节的烘托和推进，maya灯光类型以及应用场景。）*

5.1照明基础理论

*（照明基础理论、灯光类型应用场景）*

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5.2灯光制作及渲染器使用

*（根据分镜制作每个镜头灯光，具体几个比较有代表性的镜头进行分析，并对选择的渲染器进行阐述）*

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5.3分层渲染

*（为什么分层、如何分层、怎么使用层）*

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6 特效制作*（注：每一章都重开一页开头）*

*（作品涉及到的特效效果，该部分主要是进行特效制作和测试，分析特效在作品中的表现和用处，并找到最优的特效制作思路和效果。）*

6.1 头发动力学制作及测试

*（先介绍制作思路，再介绍制作内容）*

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6.2 布料动力学制作及测试

*（先介绍制作思路，再介绍制作内容）*

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6.3 烟、火、流体制作及测试

*（先介绍制作思路，再介绍制作内容）*

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7 后期制作*（注：每一章都重开一页开头）*

*（阐述作品到达中期阶段后的主要工作任务，前期设计过程中的问题所涉及的后续工作的调整与修改，包括输出画面后的音乐音效风格确定，输出视频所遇到的问题以及不足等。）*

**7.1后期特效制作**

*(后期特效制作)*

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**7.2后期剪辑及调色**

*[（剪辑视频、色调的校正）](#_Toc7985511)*

[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX……](#_Toc7985511)

**[7.3 音效合成及出片](#_Toc7985511)**

*（音乐音效风格、输出视频遇到的问题，不足）*

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8 总结*（注：每一章都重开一页开头）*

*（结论概括设计的情况和价值，分析其优点和特色、有何创新、性能达到何水平，并应指出其中存在的问题和今后改进的方向。）*

# 参考文献

*（在毕业设计（论文）末列出在正文中参考或引用过的专著、论文及其他资料，所列参考文献应按文中参考或引用的先后顺序排列。不少于10篇）*

[1] 中美音乐类游戏市场：App Store上架App共3160款 中国占比61%［EB/OL］．

https://www.gameres.com/820660.html, 2018-09-04

[2]游戏美术在手机游戏界面中的研究 [J] . 邵兵,梁皓. 电脑迷. 2017(06)

[3]CG绘画在游戏美术设计中的运用 [J]. 李茂洋. 大众文艺. 2017(09)

……

# 谢 辞

*（简述自己做毕业设计（论文）的体会，并应对指导教师和协助完成设计（论文）的有关人员表示谢意。）*

为时一个学期的毕业设计即将结束了，这也意味者我在北京理工大学珠海学院的大学生涯也即将结束。在毕业设计这段时间里，我得到了很大的自身提高，其中包含了对汽车系统知识的理解、还有对有关这方面书籍的认识等等，这些都得益于老师和同学的大力帮助，…….

# 附 录

*（可选项，对于一些不宜放在正文中，但有参考价值的内容，可编入附录中。例如，公式的推演、编写的算法、语言程序、设计图纸等。）*

1. Roguelike是欧美国家对一类游戏的统称，是角色扮演游戏（RPG）的一个子类（Roguelike-RPG） [↑](#footnote-ref-1)