
CINE ENGINE
vfx pipeline technologies

Cine Engine

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Pipeline TD 360

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Overview

Pipeline TD 360: Comprehensive Training in CGI Production Pipeline: Your Path to Becoming a Pipeline Technical Director

Dive into the dynamic world of animation and visual effects with our comprehensive 12-week online course, "**Pipeline TD 360**". This course is meticulously designed to equip aspiring Pipeline Technical Directors (Pipeline TDs) with the skills, knowledge, and confidence they need to succeed in the industry.

Throughout the course, you will explore the intricate role of a Pipeline TD and how it intertwines with other roles in the CGI production cycle. Learn to work with leading 3D and compositing software, and develop proficiency in Python scripting for CGI. Unravel the mystery behind APIs of different 3D software and understand the importance of version control systems.

"**Pipeline TD 360**" further empowers you with the knowledge of pipeline tools and systems, including render management, digital asset management, and pipeline integration tools. You will also discover how to build modular and scalable pipeline tools.

Our course lays a strong emphasis on automation and optimization in the CGI pipeline, training you to create custom tools and scripts for automation and optimize pipeline processes. Plus, you'll gain crucial debugging and problem-solving skills.

Advanced topics covered in the course include working with databases, machine learning for CGI, cloud-based pipelines, remote work solutions, and security and backup systems.

"**Pipeline TD 360**" culminates with a final project, allowing you to apply the skills you've acquired throughout the course. You will receive constructive feedback on your work and present your project, paving the way for real-world applications. Upon successful completion, you will receive a certificate as a testament to your newly acquired skills.

This course is taught by industry experts who bring their practical knowledge and experience into the course content. Whether you're a newbie seeking a strong start or a professional looking to upskill, "**Pipeline TD 360**" opens the door to the exciting world of animation and visual effects pipeline technology. Enroll today and start your journey to becoming a Pipeline TD.

Goals

1. **Understanding the Role:** Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan.
2. **Mastering Tools and Software:** Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum.
3. **Proficiency in Scripting and Programming:** The course aims to impart skills in Python scripting for CGI, including APIs of different 3D software and version control systems.
4. **Learning about Pipeline Tools and Systems:** By the end of the course, students will have in-depth knowledge of render management, digital asset management, pipeline integration tools, and the creation of modular, scalable pipeline tools.
5. **Acquiring Automation and Optimization Skills:** Students will learn about automation in the CGI pipeline, create custom tools and scripts for automation, optimize pipeline processes, and develop problem-solving and debugging skills.
6. **Delving into Advanced Topics:** The course aims to introduce students to databases, machine learning for CGI, cloud-based pipelines, remote work solutions, and security and backup systems.

7. **Developing Real-world Applications:** A key goal of the course is to enable students to apply the skills they've learned throughout the course to real-world scenarios and problems.
8. **Gaining Certification:** Upon successful completion of the course and the final project, students will earn a certification validating their newly acquired skills and knowledge.

The overarching goal of the "**Pipeline TD 360**" course is to provide a comprehensive, industry-relevant education that prepares students for a successful career as a Pipeline Technical Director.

Course Curriculum

Module 1: Introduction to Pipeline TD Role

1.1 Understanding the Role of a Pipeline TD

1.2 Differentiating between roles: Pipeline TD, Technical Artist, Technical Director

1.3 Pipeline TD in the Production Cycle

Module 2: Basic Concepts

2.1 Understanding of CGI Pipeline

2.2 CGI Production Stages

2.3 Overview of 3D Software (Maya, Houdini, 3ds Max, Blender etc.)

2.4 Introduction to Compositing Software (Nuke, After Effects etc.)

2.5 Data Management and Tracking Systems (Shotgun, Ftrack etc.)

Module 3: Scripting and Programming

3.1 Python Scripting for CGI

3.2 PyMel for Maya

3.3 Scripting for Nuke

3.4 Introduction to APIs of different 3D software

3.5 Object-Oriented Programming in Python

3.6 Version Control Systems (Git)

Module 4: Pipeline Tools and Systems

4.1 Understanding Render Management (Deadline, RenderMan)

4.2 Digital Asset Management

4.3 Pipeline Integration Tools (Shotgun Toolkit)

4.4 Building Modular and Scalable Pipeline Tools

Module 5: Automation and Optimization

5.1 Automation in the CGI Pipeline

5.2 Creating Custom Tools and Scripts for Automation

5.3 Optimizing Pipeline Processes

5.4 Debugging and Problem Solving

Module 6: Advanced Topics

6.1 Working with Databases (SQL)

6.2 Introduction to Machine Learning for CGI

6.3 Cloud-Based Pipelines and Remote Work Solutions

6.4 Security and Backup Systems

Module 7: Real-World Applications and Case Studies

7.1 Pipeline TD Case Studies

7.2 Industry Guest Lectures

7.3 Round Table Discussions

Module 8: Final Project and Certification

8.1 Project Proposal

8.2 Project Implementation

8.3 Final Presentation

8.4 Course Review and Certification

“Pipeline TD 360” includes a combination of theoretical learning, practical workshops, and real-world case studies. This will ensure students have a good understanding of the job role, as well as the skills and experience needed to excel. Feedback and assessment throughout the course are also provided to ensure students are progressing and to help them improve.