



DIGITAL  
TALENT  
SCHOLARSHIP



# VOCATIONAL SCHOOL GRADUATE ACADEMY

**Motion Graphic Artist / Intermediate Animator**

**Hari #2 : 3D Modelling, Camera & SLR (Shading-Lighting-Rendering)**

**Lokasi Pelatihan: Hotel Ibis Gading Serpong**



KOMINFO



**#JADIJAGOANDIGITAL**

Badan Penelitian dan Pengembangan Sumber Daya Manusia

# PROFIL PENGAJAR



## Iwan Sonjaya

Multimedia Designer

Adobe Certified Profesional

Unity Certified Associate Programme

### Education

- 2001-2004  
Master Of Technology Management  
Pelita Harapan University  
GPA : 3.08
- 2004-2007  
Master Of Information Technology  
Institut Teknologi Bandung  
GPA : 3.41

### About Me

I was born in Karawang, and raised in South Jakarta, and now I'm proud to be raising my young family in Depok. I love helping people find solution for learning something new.

### Expertise Skill

- Graphic design
- Game Artist
- Game Programming
- Instructional Media Design
- Video editing

### Contact Me

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- 📍 Cluster Taman Sakinah No.11 C Depok - Jawa Barat

### Work Experience

- Instructional Media Designer  
Pustekom Kemendikbud-2010
  - create asset for material learning based on web
  - Create Script for Interactive Media Learning
- Drafting Indonesian National Competency Framework Standards For Game Development  
Pusbang Proseri Kemenkominfo-2021
  - Formulate work competency standards in the field of game development
  - Develop competency elements and performance criteria for work competency standards in game development to reach more client in website and social media.

# Deskripsi Singkat

mengenai Topik

## Deskripsi Singkat mengenai Topik

Topik pengenalan software 3d :

1. Pengenalan Tools Modeling,
2. Pembelajaran Teknik Pemodelan 3D
3. Pengenalan Tools Camera & SLR

## Tujuan Pelatihan

1. Peserta dapat mengetahui fungsi – fungsi tools pada Software 3D.
2. Peserta dapat membuat Pemodelan 3D dengan menggunakan 3D
3. Peserta dapat memahami dan menggunakan 3D Camera.
4. Peserta dapat memahami dan menggunakan tools SLR
5. Peserta dapat membuat Logo 3D sampai Rendering

## Materi Yang akan disampaikan:

1. Modeling workflow
2. 3D Camera
3. 3D SLR

## Tugas :

1. TUGAS MANDIRI

# 3D SOFTWARE

## Open Source

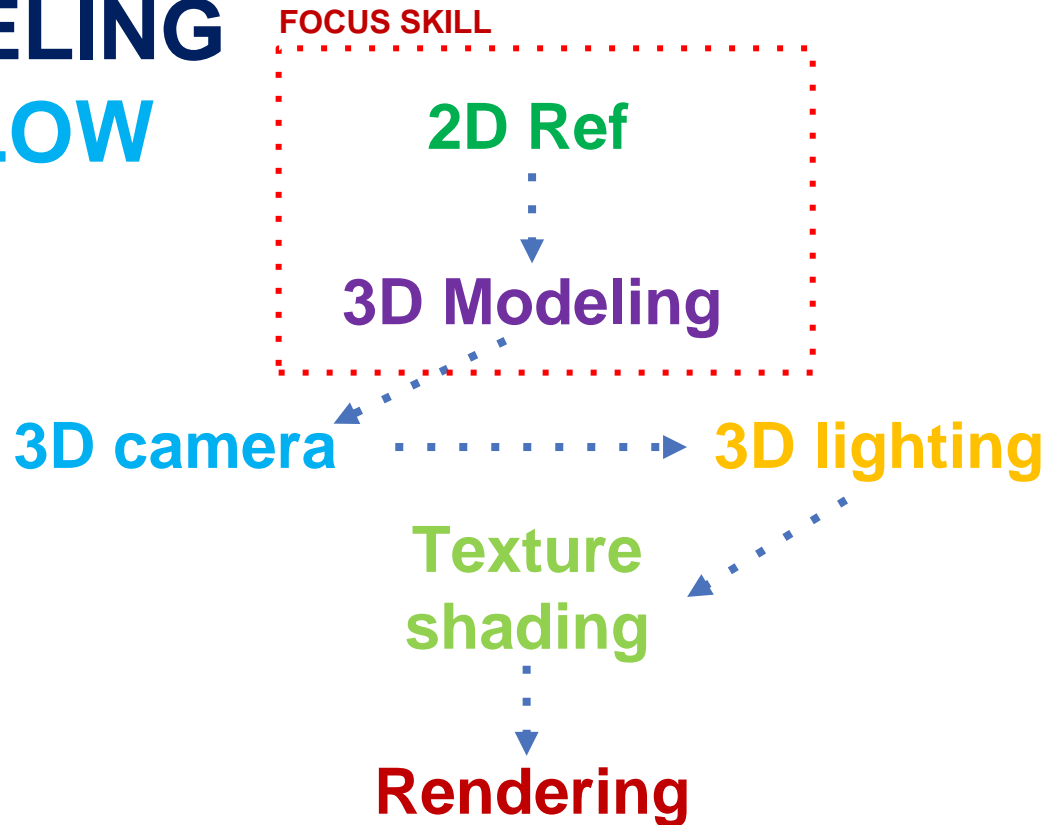


All About  
Fundamental Blender

## Commercial



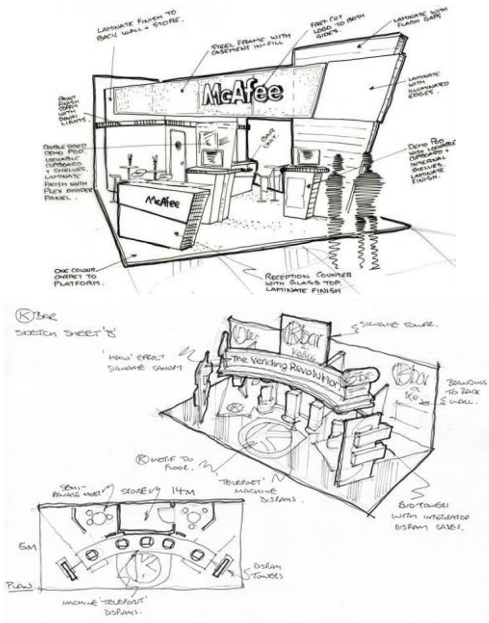
# 3D MODELING WORKFLOW



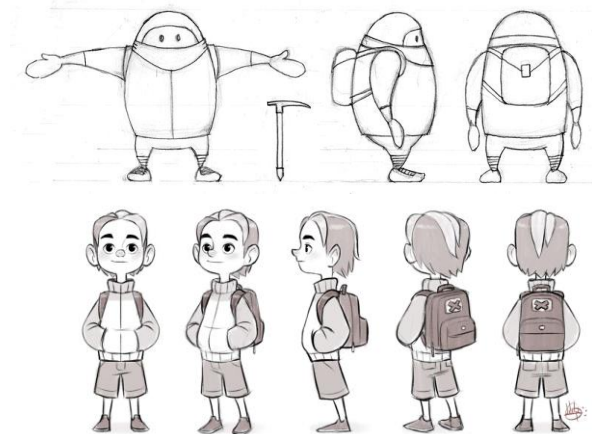
# 3D MODELING WORKFLOW

## FOCUS SKILL

## VirtualSet 2D References



# Organic 2D References



# 3D MODELING WORKFLOW

## 3D Modeling Method

### 1. IMPORT

#### FOCUS SKILL

Vector (line) Base

AI,SVG,DWG,etc..

+

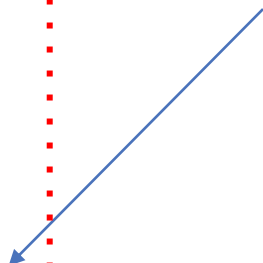
EXTRUDE



3D OBJECT

Object (3D) Base

Obj,Fbx,3ds,  
Collada, etc..



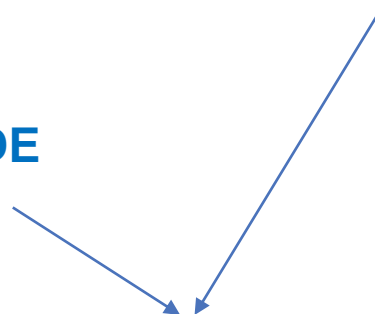
### 2. CREATION

Line Modeling

Mesh (3D) Modeling

+

EXTRUDE



3D OBJECT

# 3D LOGO WORKFLOW





# 3D LOGO WORKFLOW

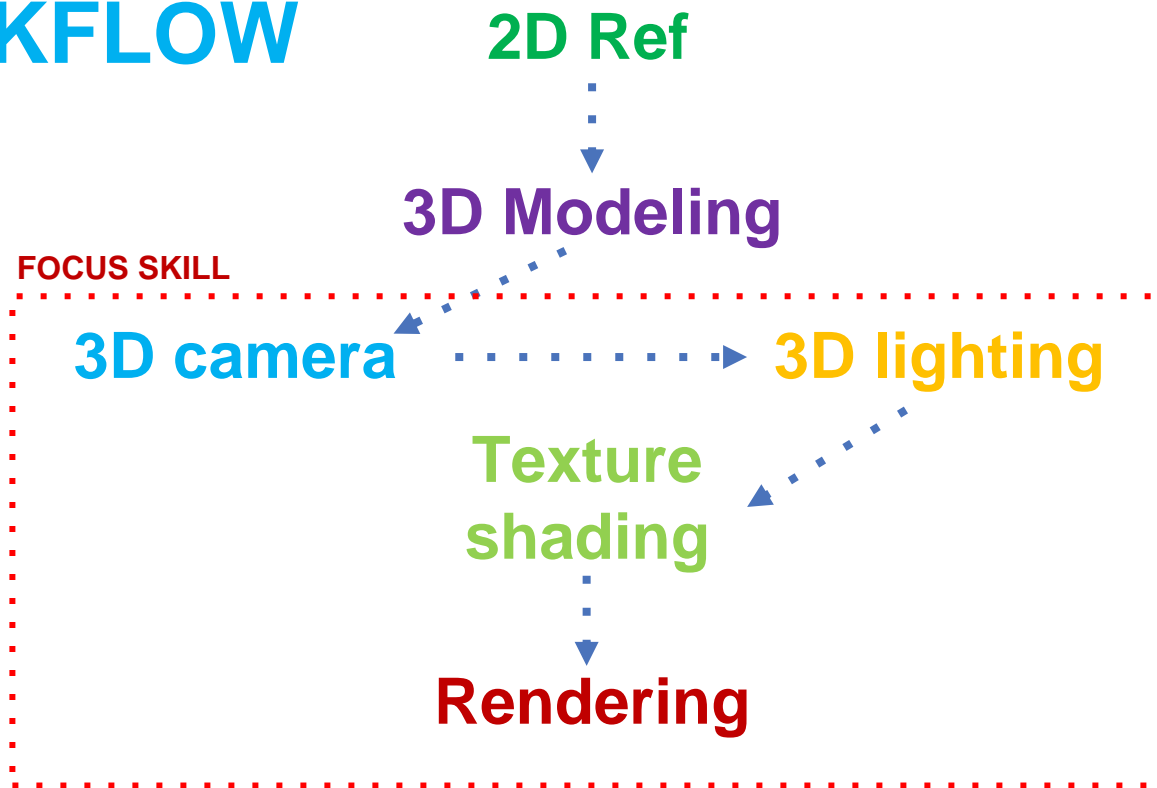


From AI to BLENDER  
Case 01

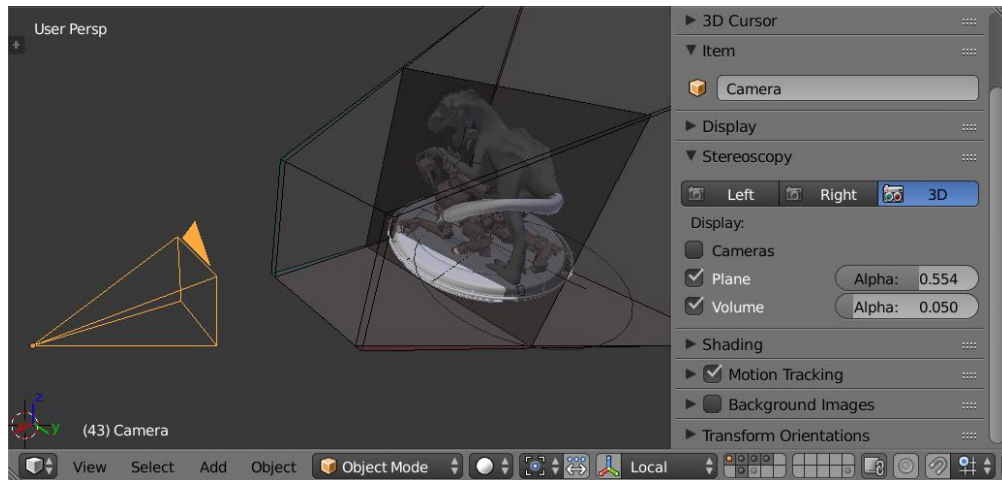


From AI to BLENDER  
Case 02

# 3D MODELING WORKFLOW



# 3D CAMERA WORKFLOW



**FUNDAMENTAL  
CONCEPT 3D CAMERA  
IN BLENDER**

# 3D CAMERA WORKFLOW

**1. Focal Length**

**2. Depth Of Field**

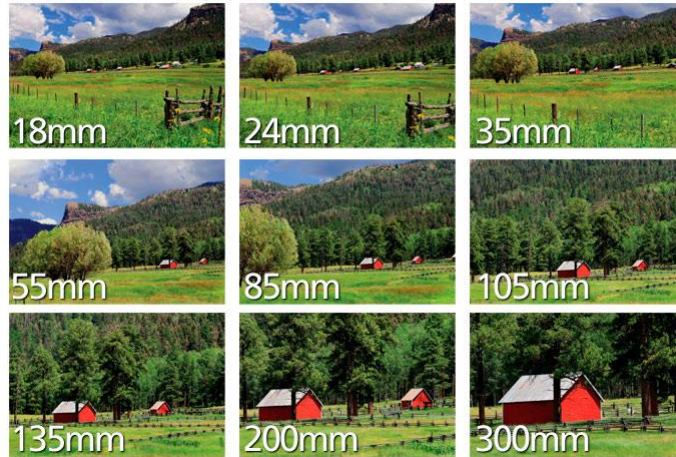
**3. Aspect Ratio**

**4. Motion Camera**

# 1. Focal Length

## Basic principle

## 3D CAMERA WORKFLOW



### EFEK JANGKAUAN LENS

- **STANDARD UKURAN** lensa mm (Milimeters)
- **Makin kecil mm MAKIN LUAS** jangkauan visual
- **Makin besar mm MAKIN DEKAT** jangkauan visual

## 2. Depth Of Field

### Basic principle

## 3D CAMERA WORKFLOW

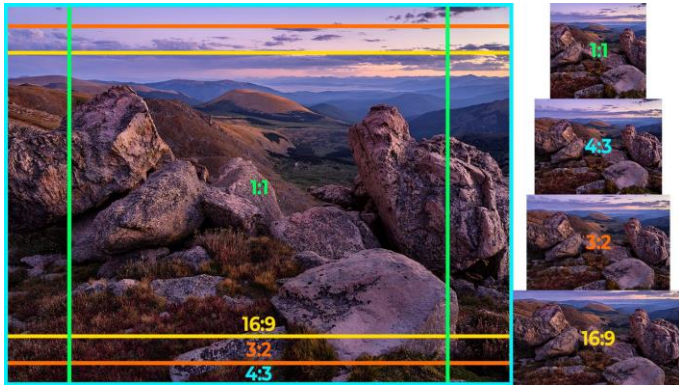


### EFEK DEPTH OF FIELD LENSA

- Makin kecil mm **MAKIN KECIL** efek blur latar
- Makin besar mm **MAKIN BESAR** efek blur latar

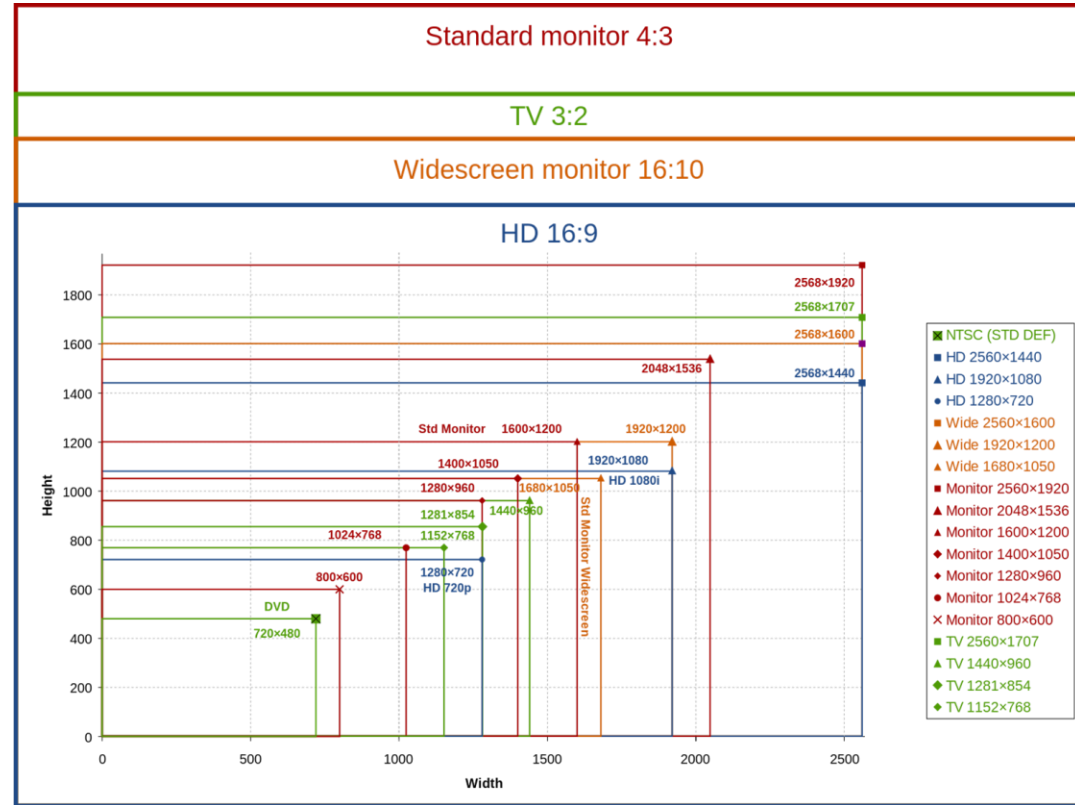
### 3. Aspect Ratio

#### Basic principle



SKALA PERBANDINGAN

## 3D CAMERA WORKFLOW



SKALA UKURAN

## 4. Motion Camera

### Basic principle

### Conventional Camera

- The camera movement allows the operator to follow the artist/characters and/or to show their performance. A director may choose to move action along by telling the story as a series of cuts, going from one shot to another, or they may decide to move the camera with the action.
- Some of the most popular movements include:

*Panning*

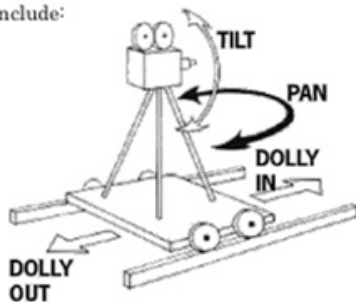
*Dolly/Tracking*

*Zoom*

*Pedestal*

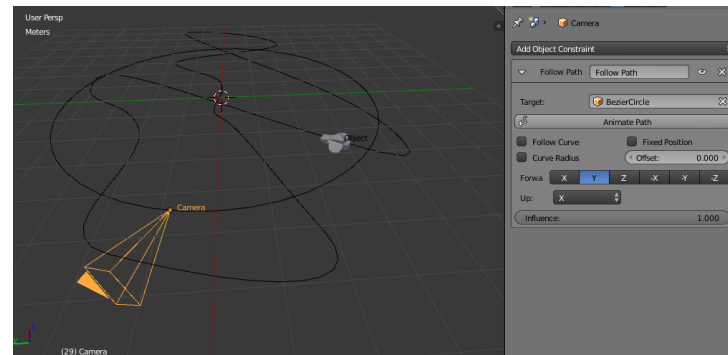
*Crane/Jib*

*Handheld*



## 3D CAMERA WORKFLOW

### CG Camera Motion Path

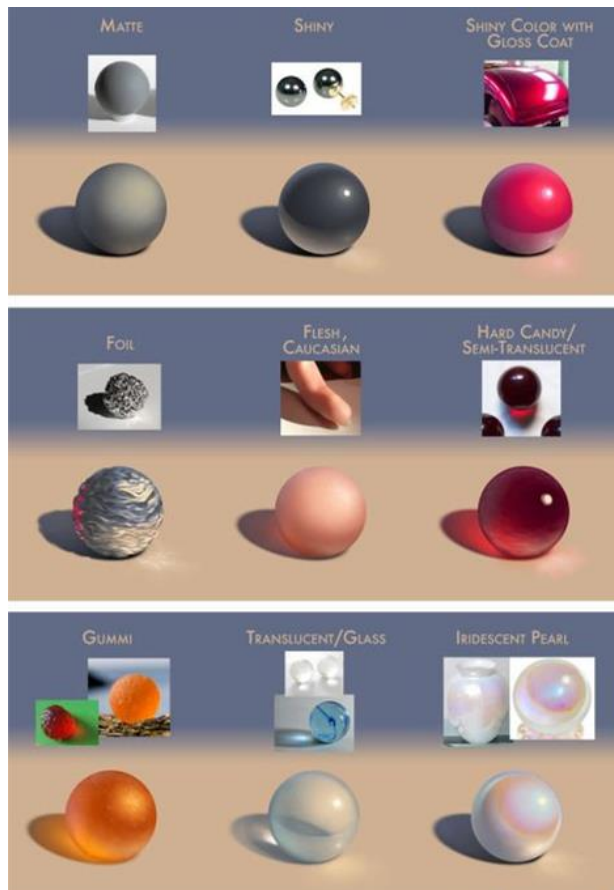




# 3D SLR WORKFLOW

## SHADING

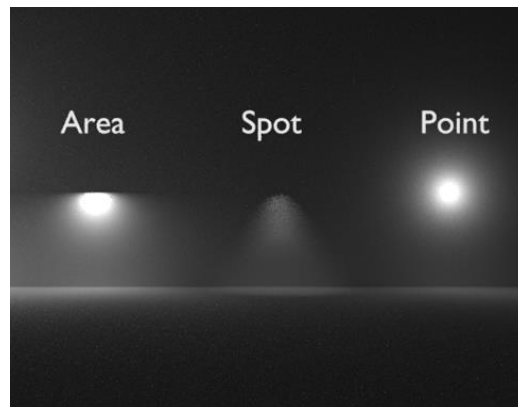
Metode parametric  
untuk menghasilkan  
SIFAT BAHAN



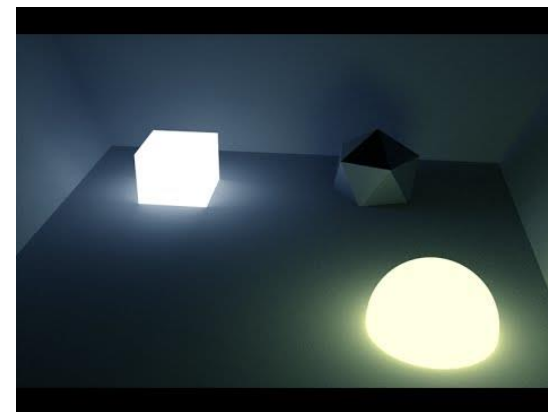
# 3D SLR WORKFLOW

## LIGHTING

Metode Pencahayaan  
untuk menghasilkan  
KECERAHAN dan  
BAYANGAN



LIGHT Source

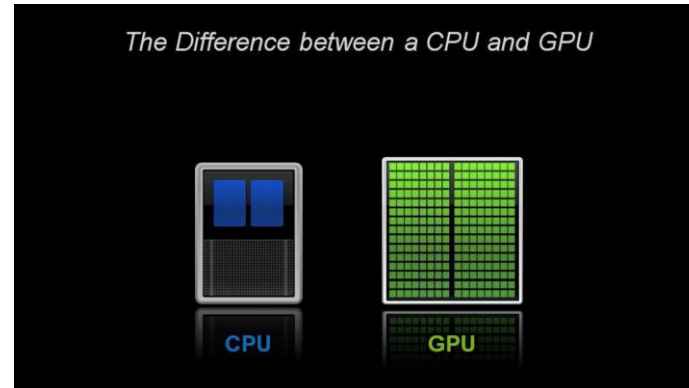
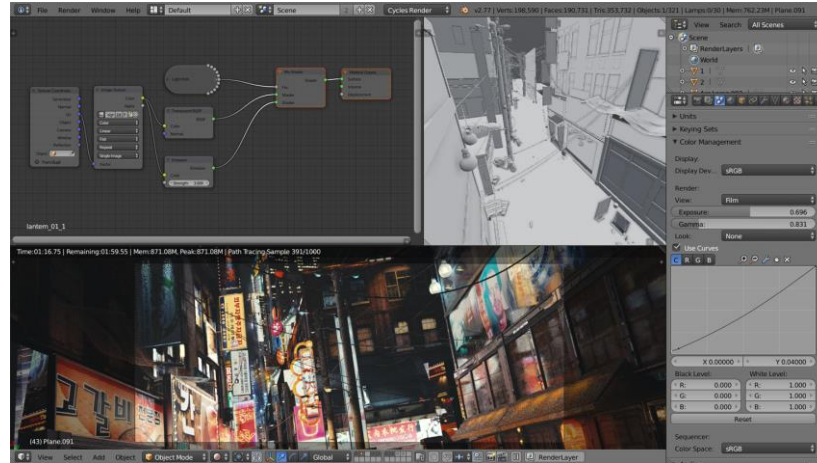


OBJECT Source

# 3D SLR WORKFLOW

## RENDERING

Metode Kalkulasi  
untuk menghasilkan  
VISUAL AKHIR



# 3D LOGO WORKFLOW



3D Modelling Logo,  
Camera & SLR

# 5 TAHAPAN BAKU

## 1. IDENTIFIKASI

- Apa yang akan dibuat
- Software apa yang dipakai
- Teknik apa untuk membuatnya
- Bagaimana output akhirnya

## 2. PERENCANAAN

- Workflow kerja dari awal sampai akhir
- Dari studi existing yang sesuai tema
- Gerak dan komposisi yang akan dibuat

## 3. PERSIAPAN

- Semua asset visual dipersiapkan
- Semua perangkat kerja (Hardware/Software) sesuai workflow kerja

## 4. Pengerjaan

- Secara berurutan
- Disimpan secara berkala
- Sesuai tuntutan SOP

## 5. FINAL OUTPUT

- Sesuai Format yang diminta
- Sesuai Ukuran Yang diminta
- Sesuai FPS yang diminta

# TUGAS AKHIR

## 6 UNIT KOMPETENSI

1. J.59ANM01.028.2 Membuat Model 3D Berbasis Hard Surface
1. J.59ANM01.035.2 Membuat Artistik Sudut Pandang Kamera 3D
1. J.59ANM00.003.2 Membuat Pergerakan (Motion) Objek Digital
1. J.59ANM03.052.2 Membuat Setting-an Sifat Bahan 3D (Shading)
1. J.59ANM01.036. 2 Membuat Artistik Pencahayaan 3D (Set Lighting)
1. J.59ANM03.053.2 Membuat Pencitraan Gambar Digital (Rendering)

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**TERIMA KASIH**



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