

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique>



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/introduction>

## Introduction

Digital representation is one of the fastest growing art mediums today because of the plethora of options it provides for the artist to explore and create. Digital representation is merely transforming tangible art into a digital platform. This module explores the ways in which hand drawn images can be translated to digital and then explored using these digital methods to animate and create a video output.



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration>

## Concept Exploration

**Concept:**

Design and animate a hybrid creature taking inspiration from an animal and mechanical creature of your choice.



Animal Study



Machine Study

### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>

## Animal Study

The first step is to collect relevant reference images to study the animal and then make a rough sketches keeping in mind these points.



### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

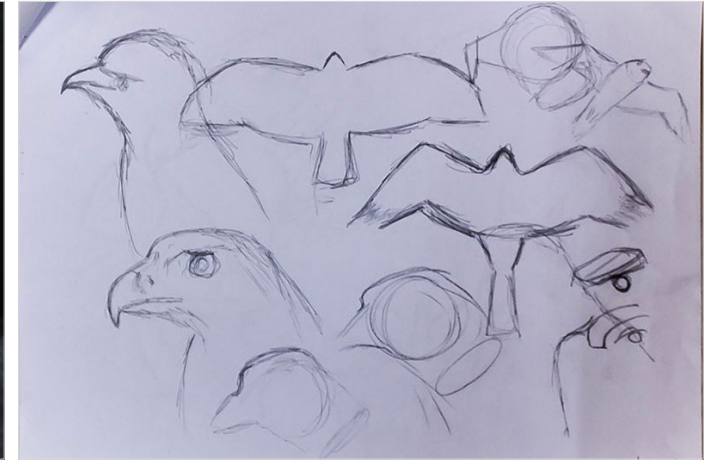
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>

a. Form - Overall shape of the creature.



b. Structure - Identify how different parts of the animal function.



1. Introduction

2. Concept Exploration

2a. Animal Study

2b. Machine Study

3. Final Hybrid

4. Transfer to Digital

5. Digital Rendering (On photoshop)

6. Digital Animation (On After Effects)

7. Exporting Final Output

8. Video

9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>

c. **Anatomy** - Learn how the muscles and bones work together to form the frame of the creature



d. **Locomotion** - Observe how the animal moves around and the nature of the movement. Eg: Sluggish and slow or Fast and light.



### 1. Introduction

### 2. Concept Exploration

2a. Animal Study

2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

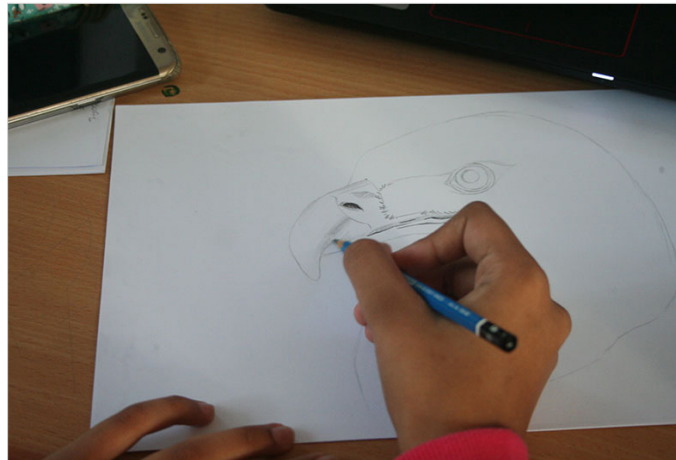
Transforming Tangible Art into a Digital Platform

by  
Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

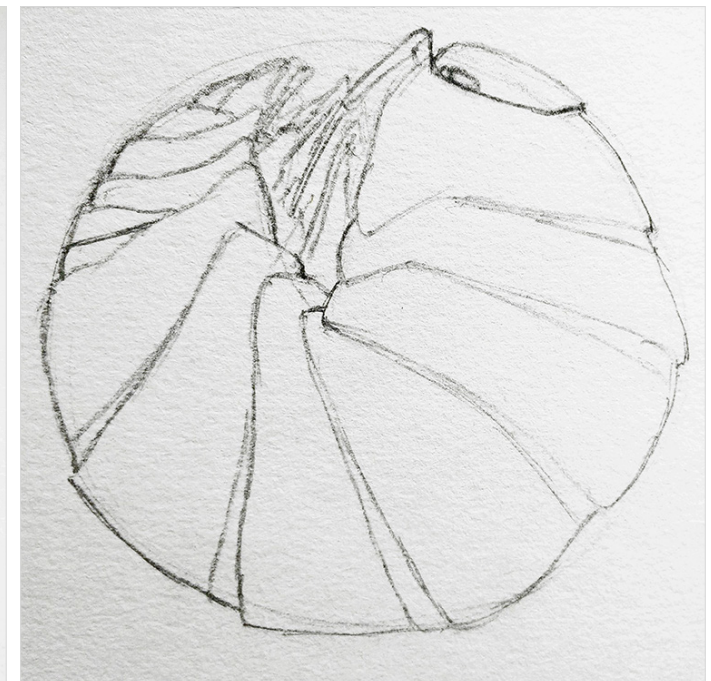
Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>

e. Design details - Observe the various aesthetic points of the creature. Eg: Yellow of the beak.



More Examples:



1. Introduction
2. Concept Exploration
  - 2a. Animal Study
  - 2b. Machine Study
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

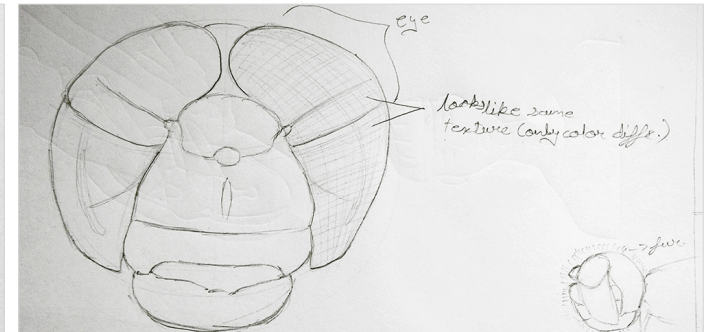
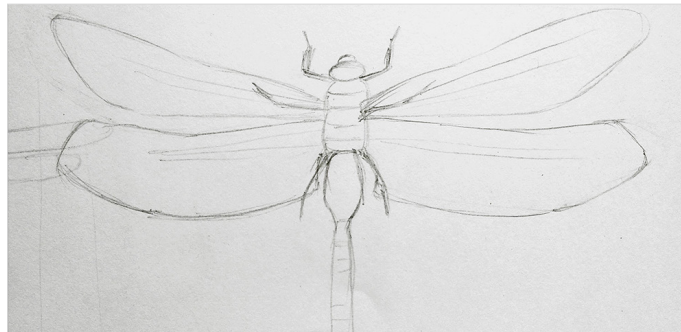
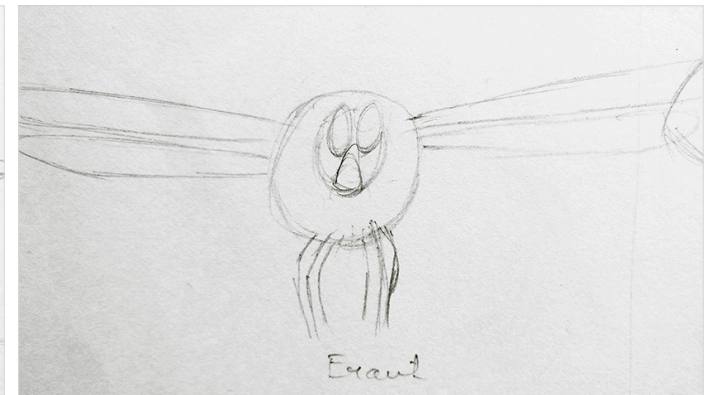
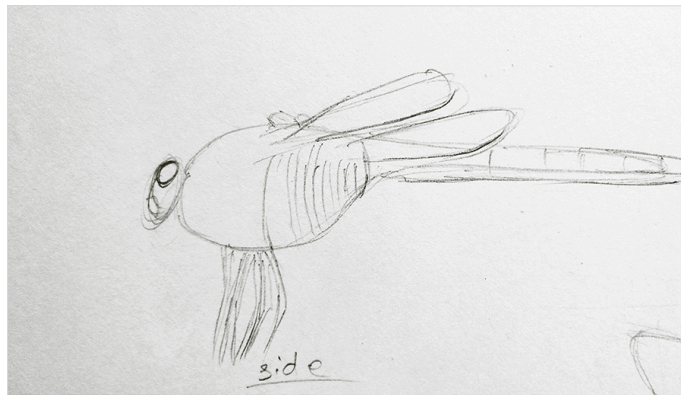
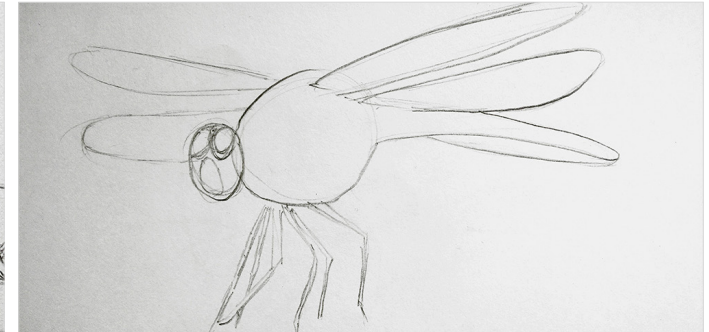
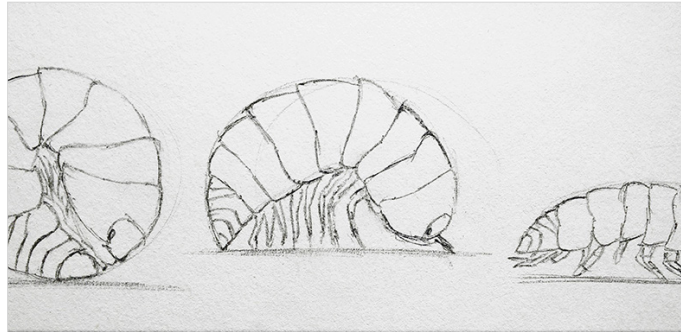
Transforming Tangible Art into a Digital Platform

by  
Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>

1. Introduction
2. Concept Exploration
  - 2a. Animal Study
  - 2b. Machine Study
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

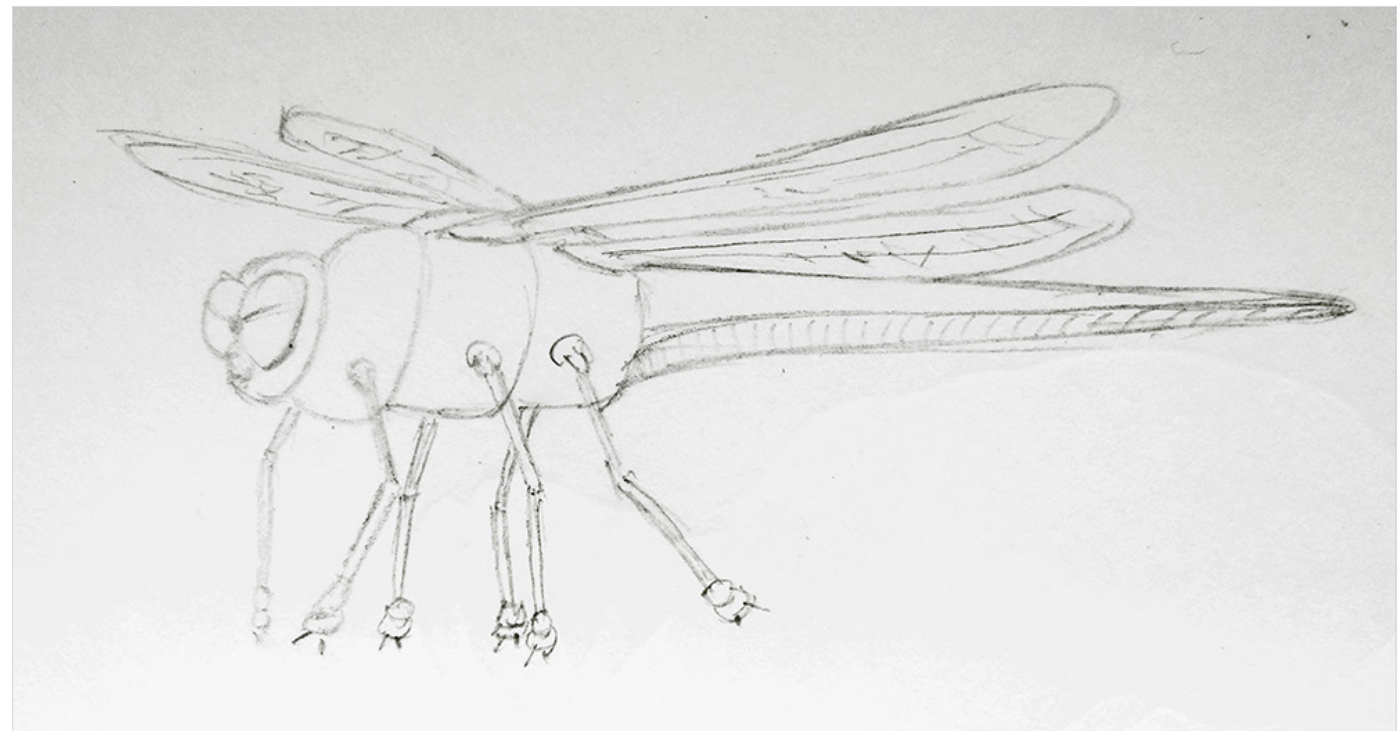
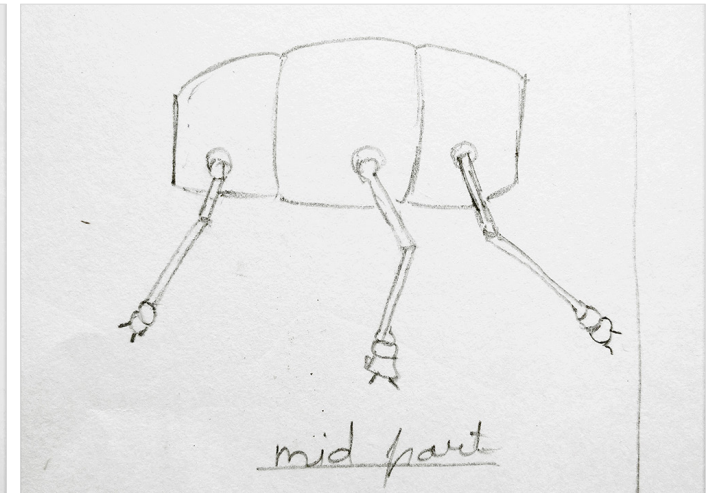
Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/animal-study>



### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

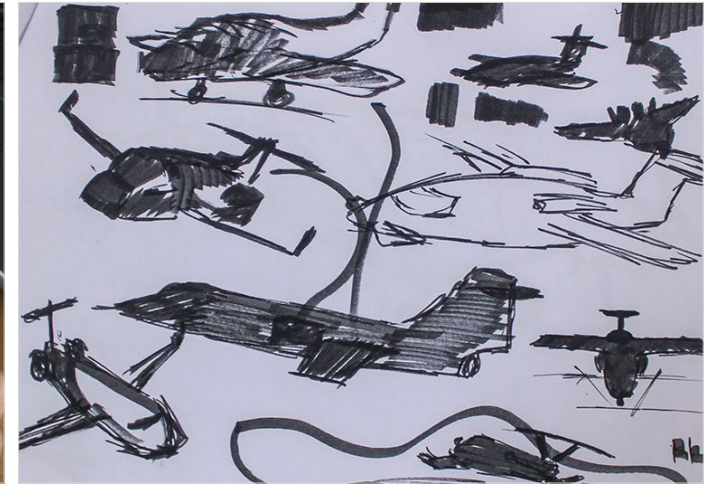
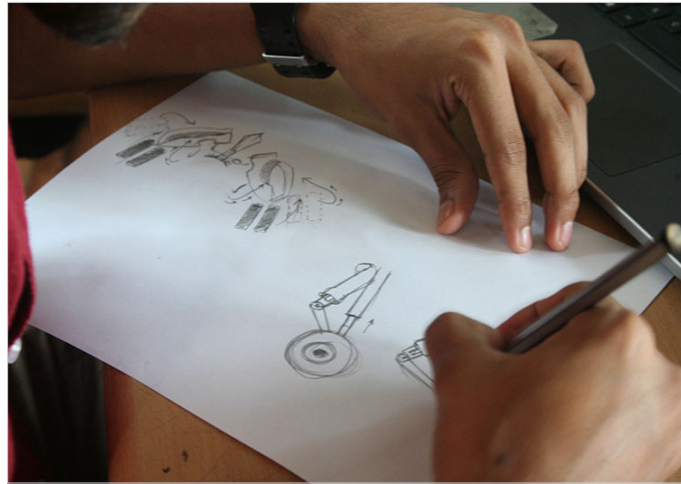
Neha Alice Kerketta, Vajra, Pranisha and Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

## Machine Study

**a. Micro and macro** - For this, all parts of the machine need to be studied in detail. From the smallest functioning unit to the biggest.



**b. Functionality** - Study the function of each part and how they add to the overall features.



### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

c. Form - Study in detail the shape of various parts to understand semantic representation.



d. Mechanics - Understand the technical workings of the machine along with its peculiar characteristics.



### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

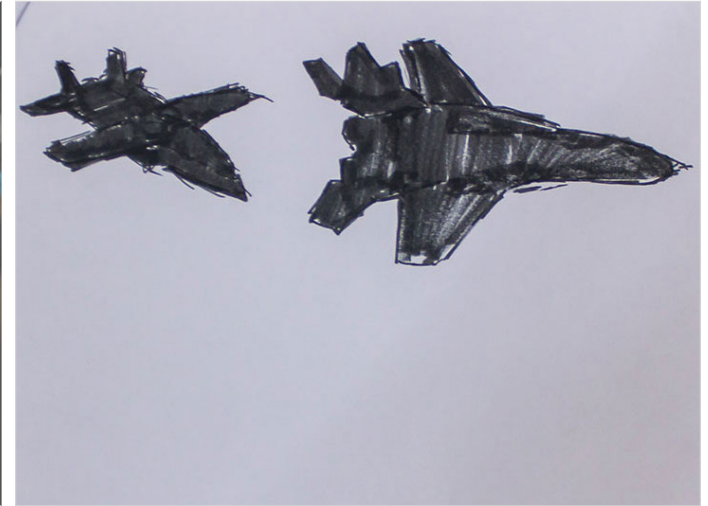
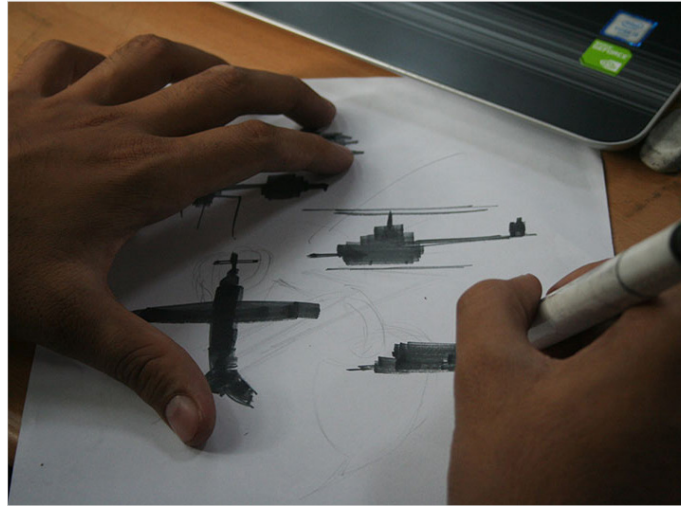
Chamandeep

IDC, IIT Bombay

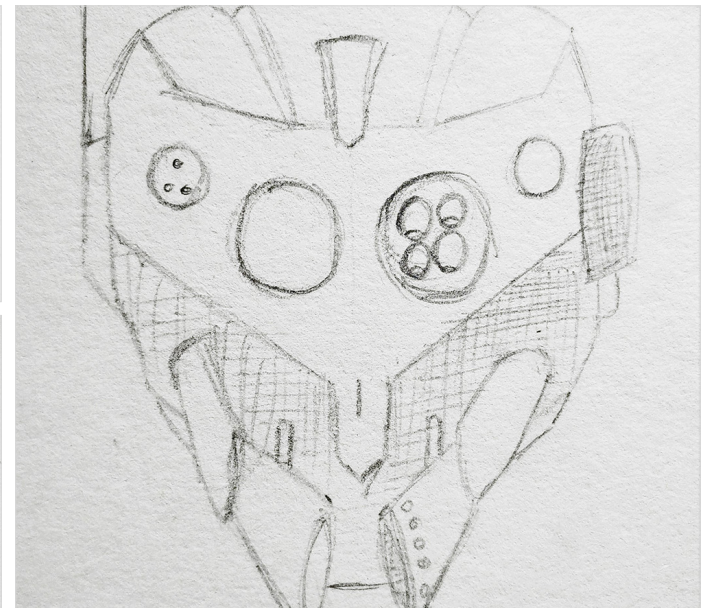
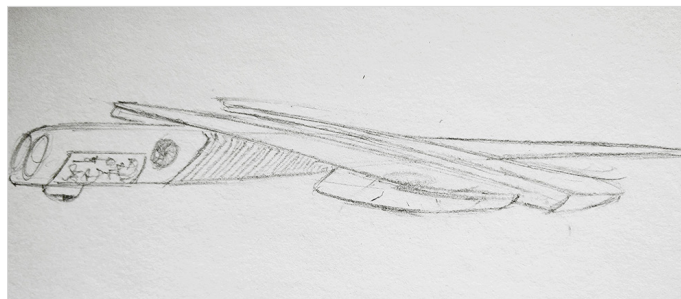
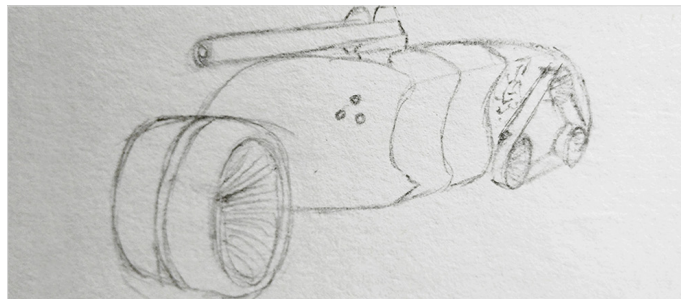
Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

**e. Simplification** - Understand the machine in a simplified form by blocking its silhouette to see the sum total of all parts.



More Examples:



### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

### 1. Introduction

### 2. Concept Exploration

#### 2a. Animal Study

#### 2b. Machine Study

### 3. Final Hybrid

### 4. Transfer to Digital

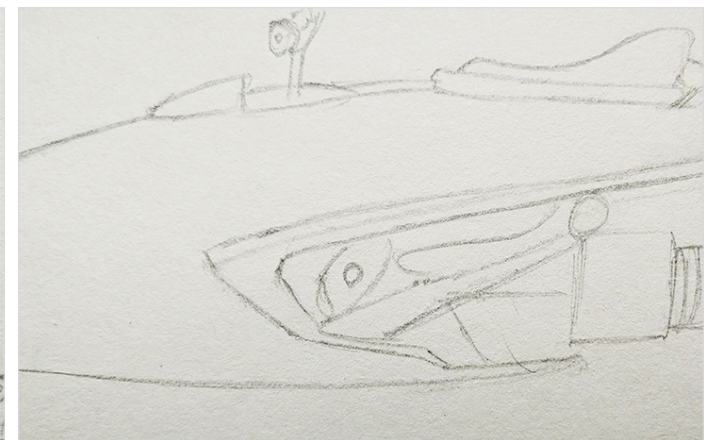
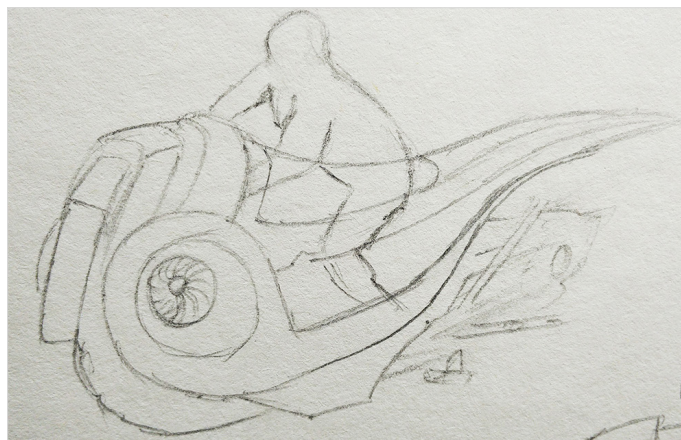
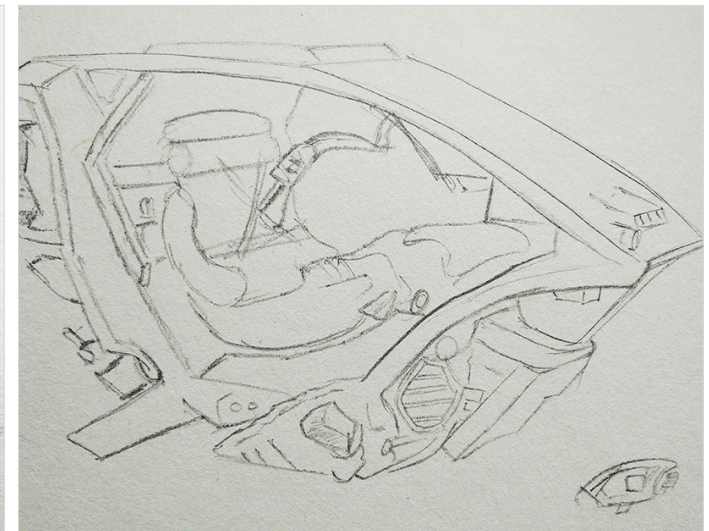
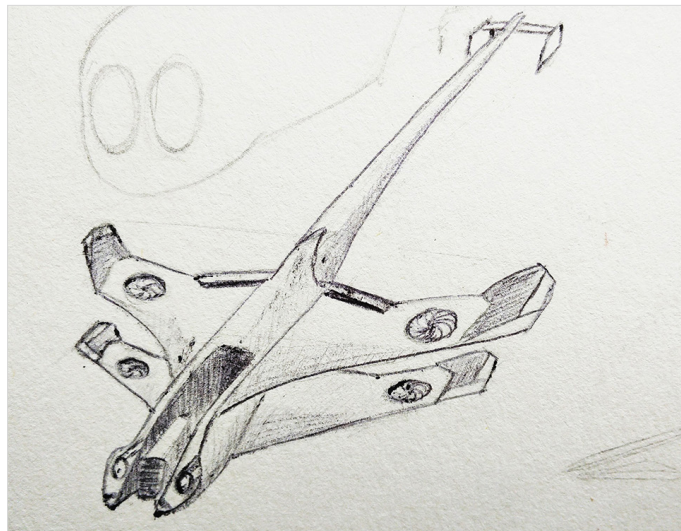
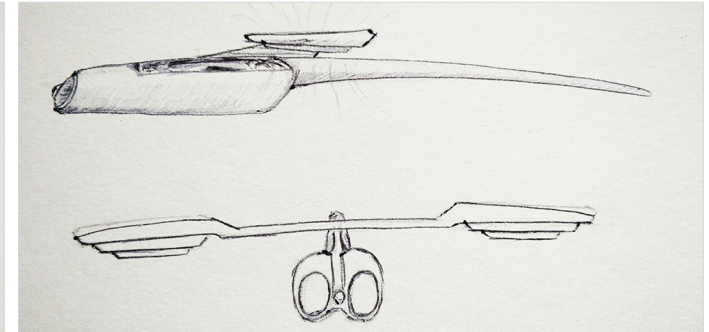
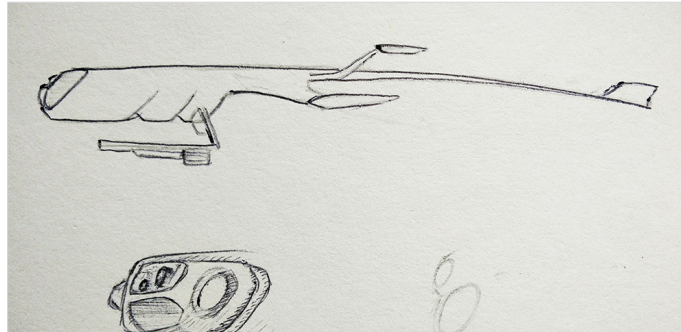
### 5. Digital Rendering (On photoshop)

### 6. Digital Animation (On After Effects)

### 7. Exporting Final Output

### 8. Video

### 9. Contact Details





Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

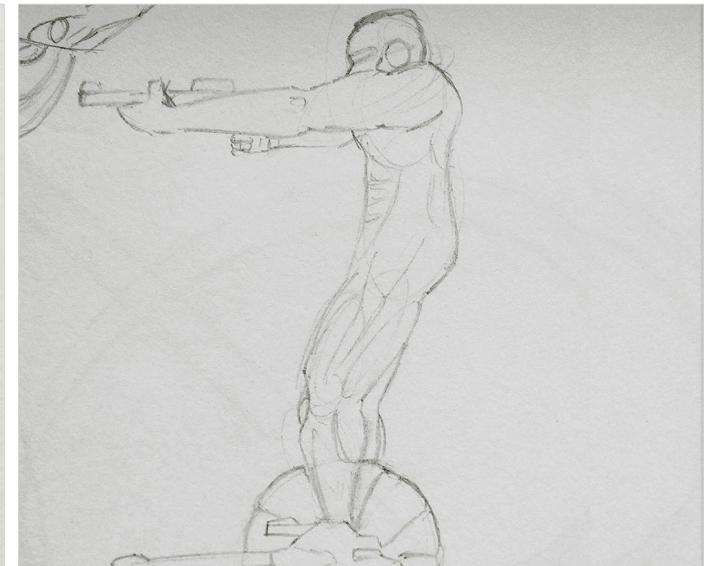
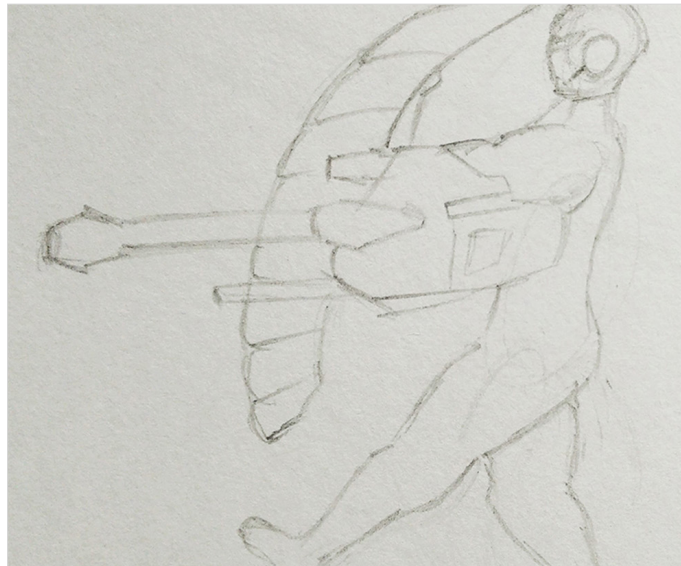
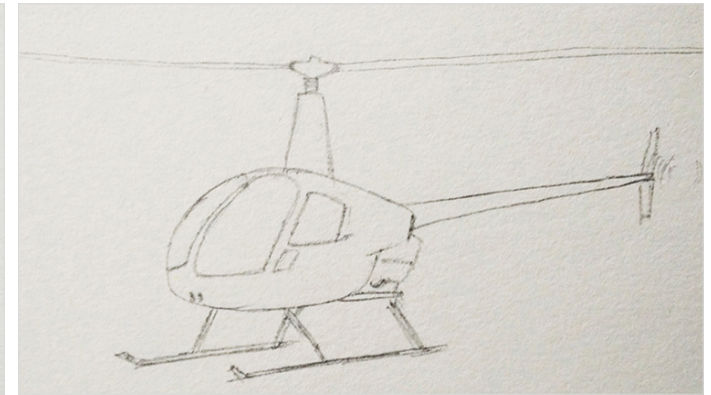
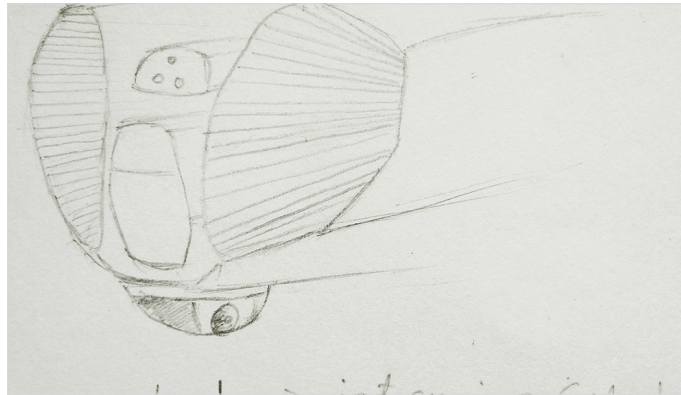
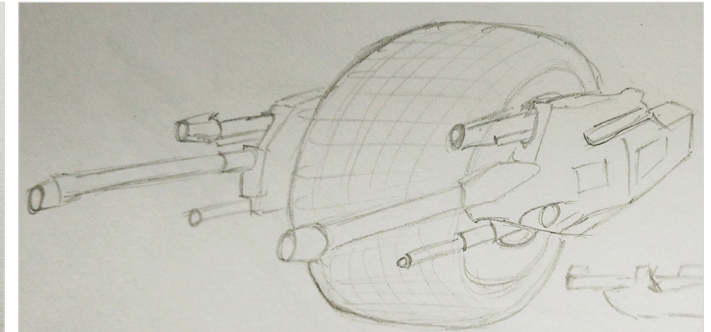
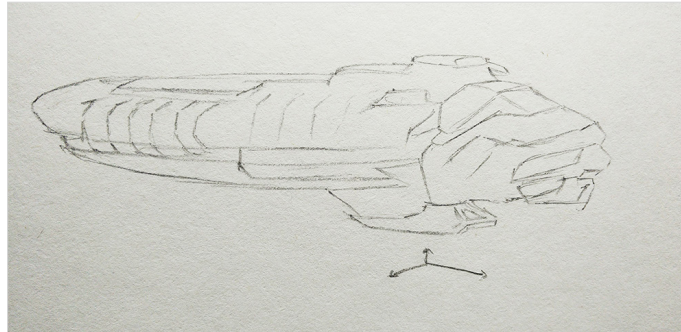
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

1. Introduction
2. Concept Exploration
  - 2a. Animal Study
  - 2b. Machine Study
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details





Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

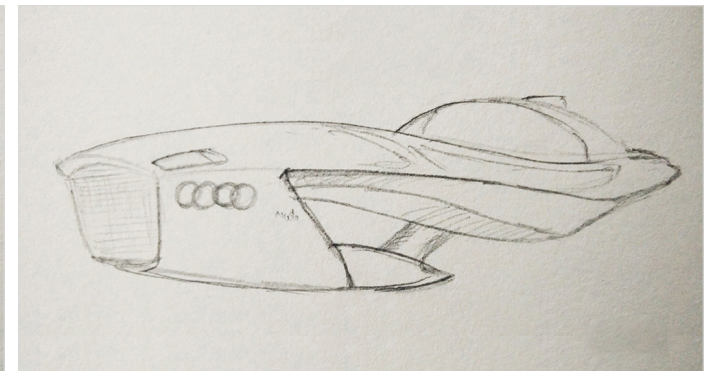
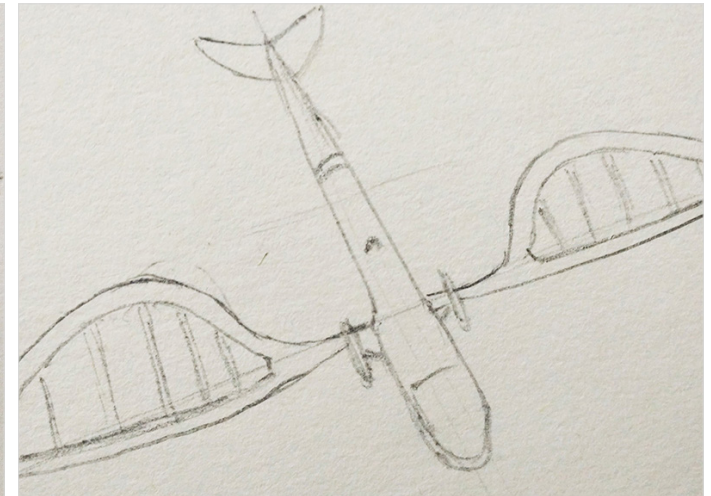
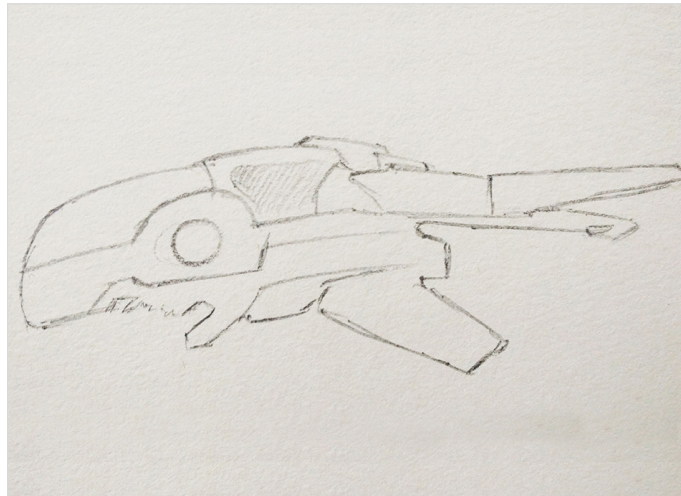
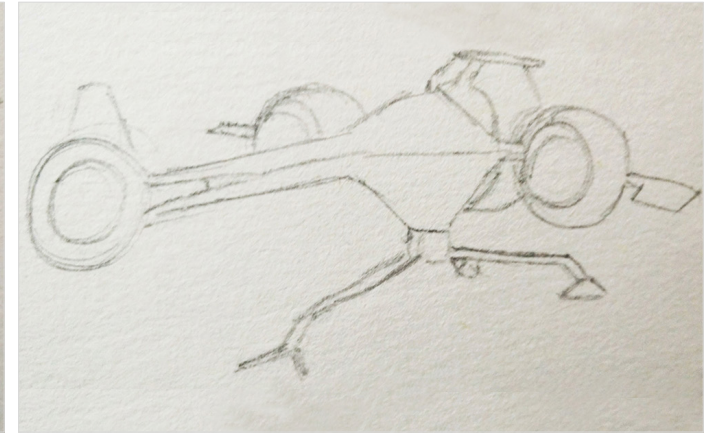
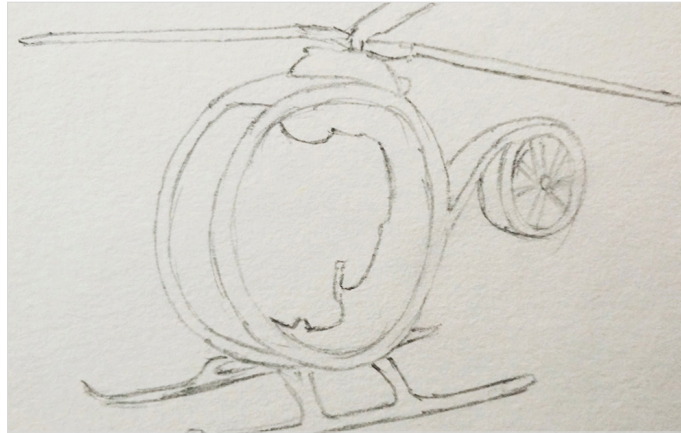
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

1. Introduction
2. Concept Exploration
  - 2a. Animal Study
  - 2b. Machine Study
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details





Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

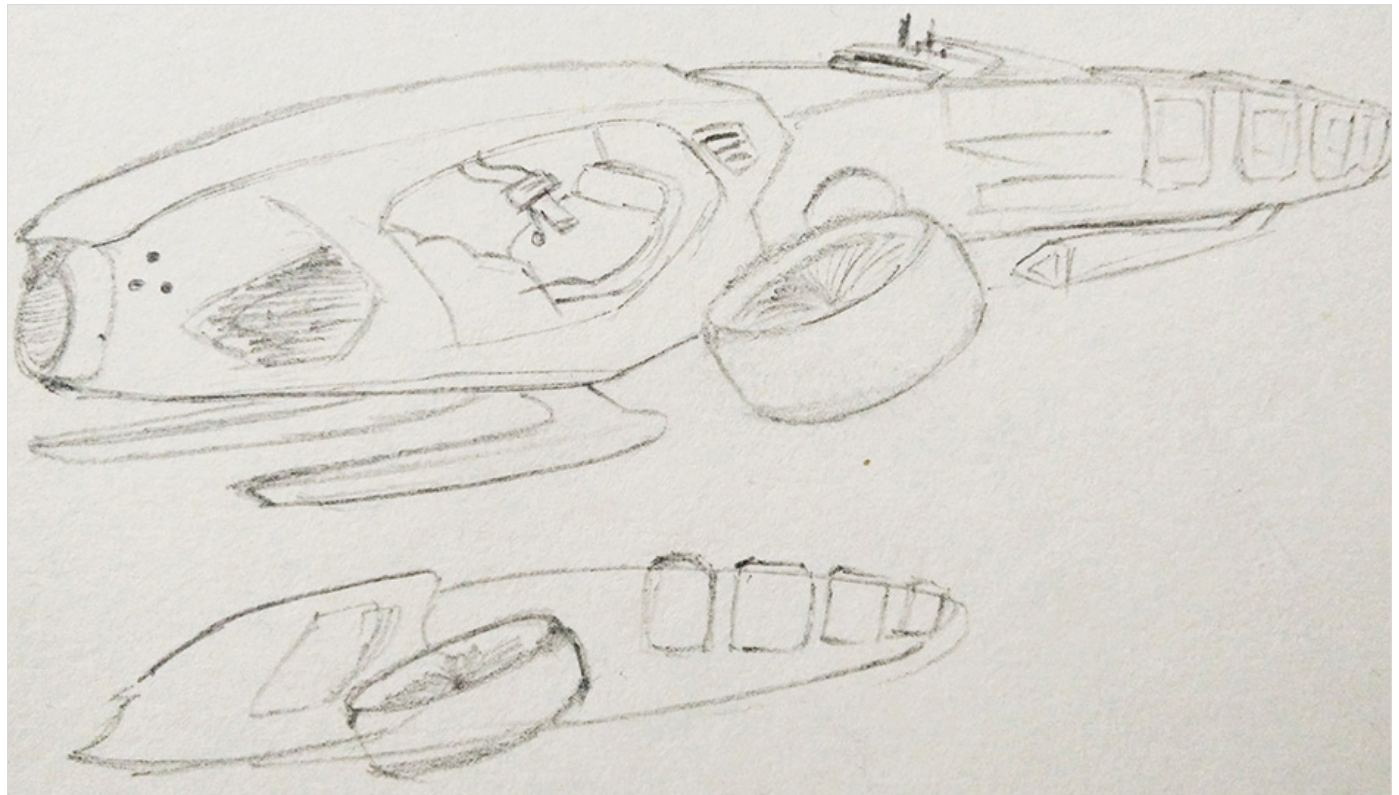
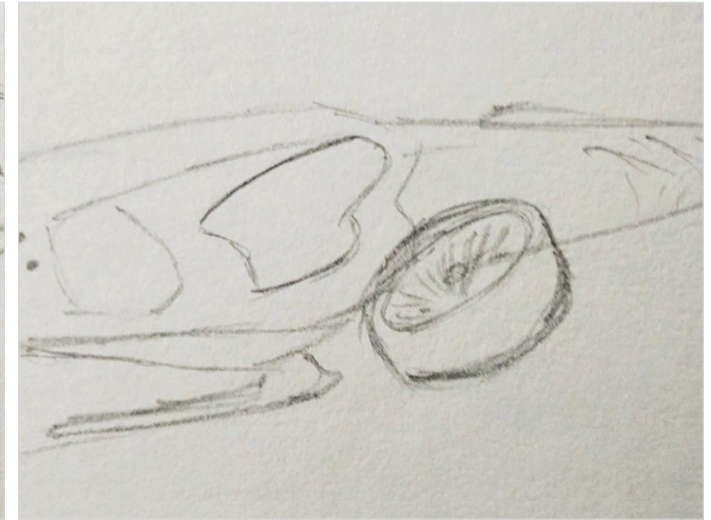
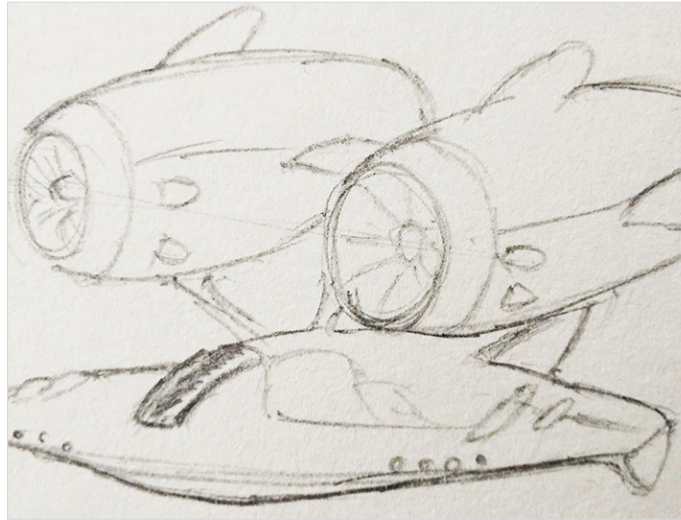
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/concept-exploration/machine-study>

1. Introduction
2. Concept Exploration
  - 2a. Animal Study
  - 2b. Machine Study
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details





Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

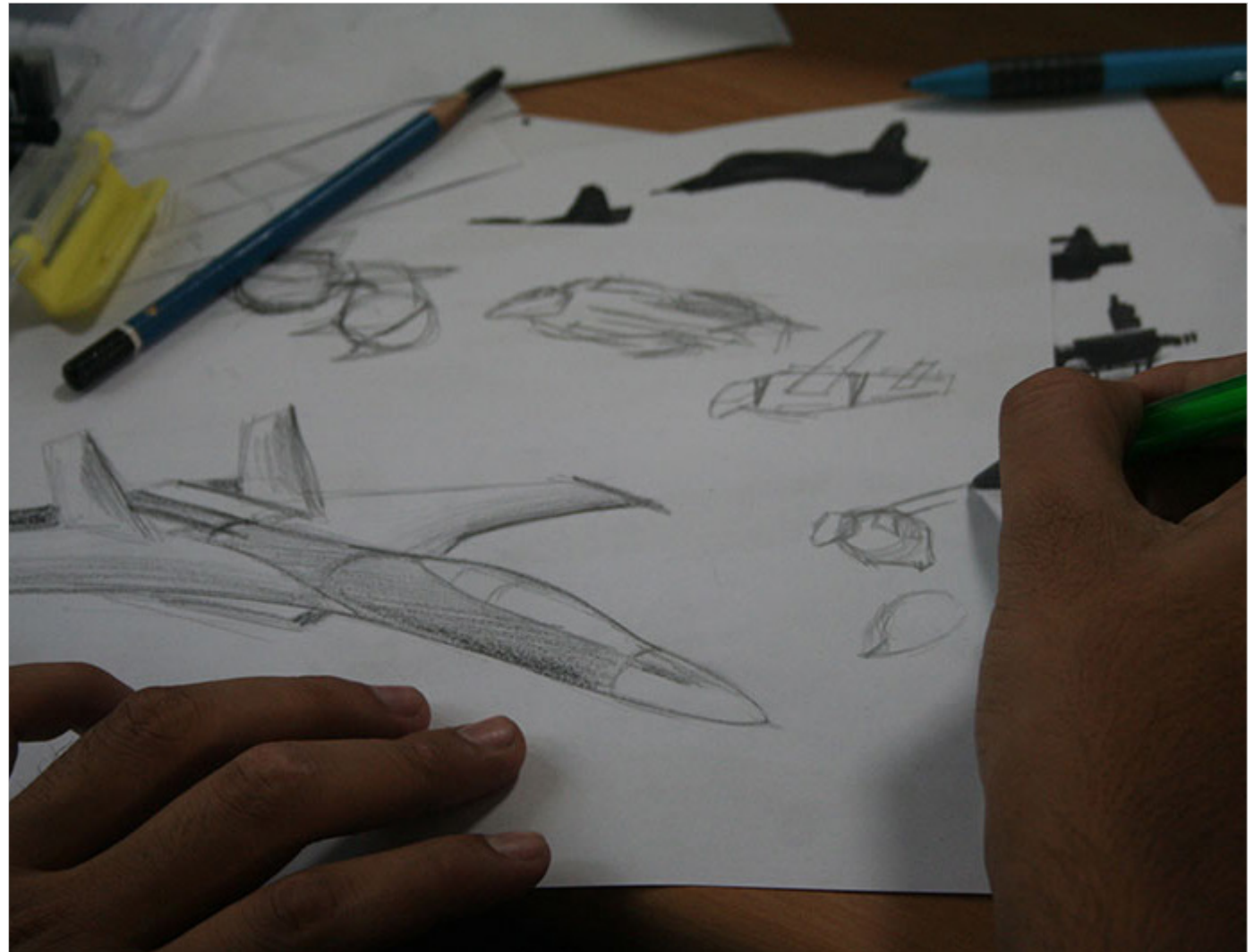
Source:

<https://www.dsource.in/course/digital-representation-technique/final-hybrid>

## Final Hybrid

In order to create the final hybrid creature we Identify the common form

- a. Blending the body mechanics
- b. Identifying macro movements



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/final-hybrid>

c. Balancing the visual form

d. Composing the final character



1. Introduction

2. Concept Exploration

3. Final Hybrid

4. Transfer to Digital

5. Digital Rendering (On photoshop)

6. Digital Animation (On After Effects)

7. Exporting Final Output

8. Video

9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

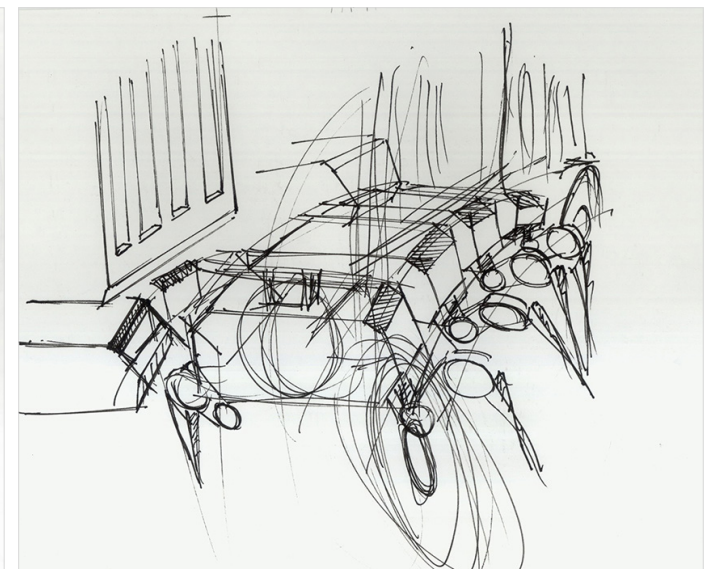
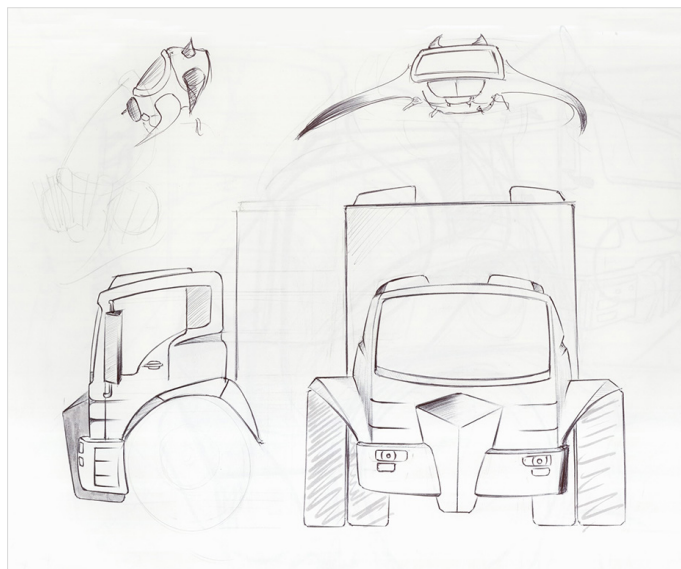
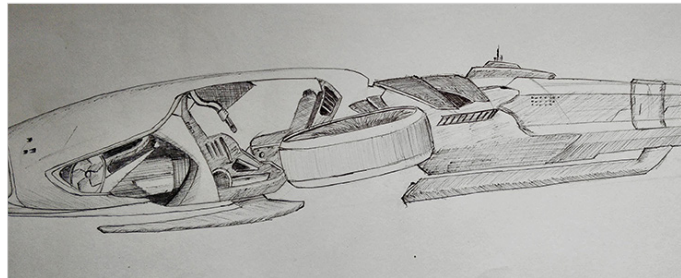
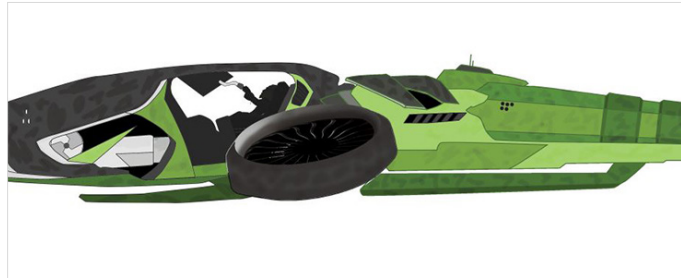
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/final-hybrid>

More Examples:



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

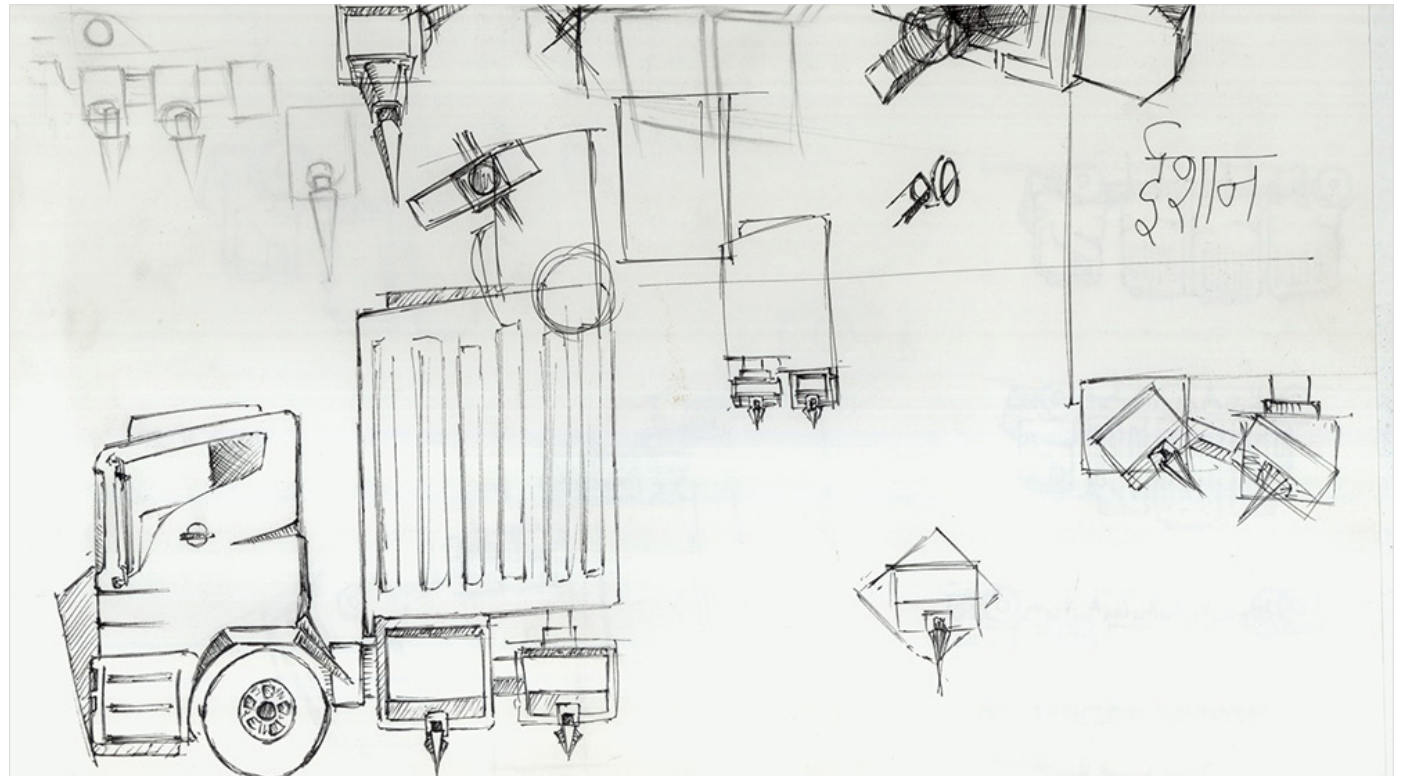
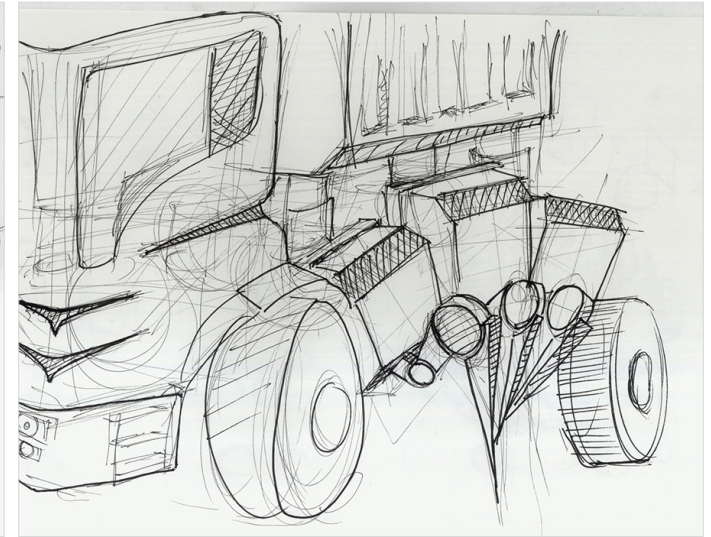
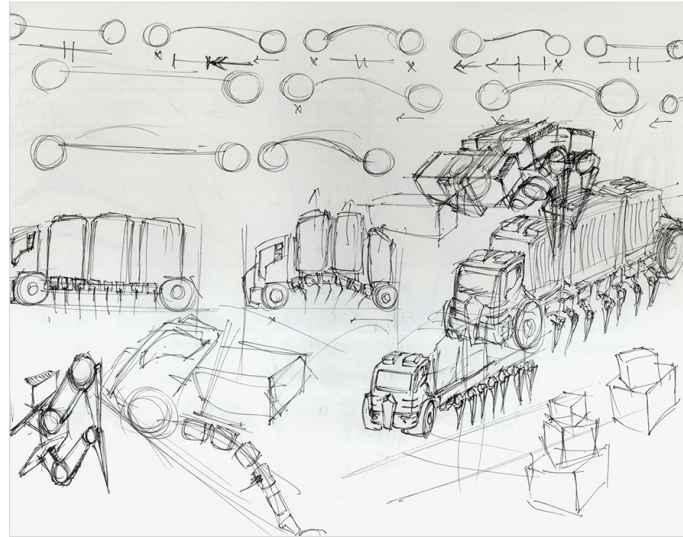
Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/final-hybrid>



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

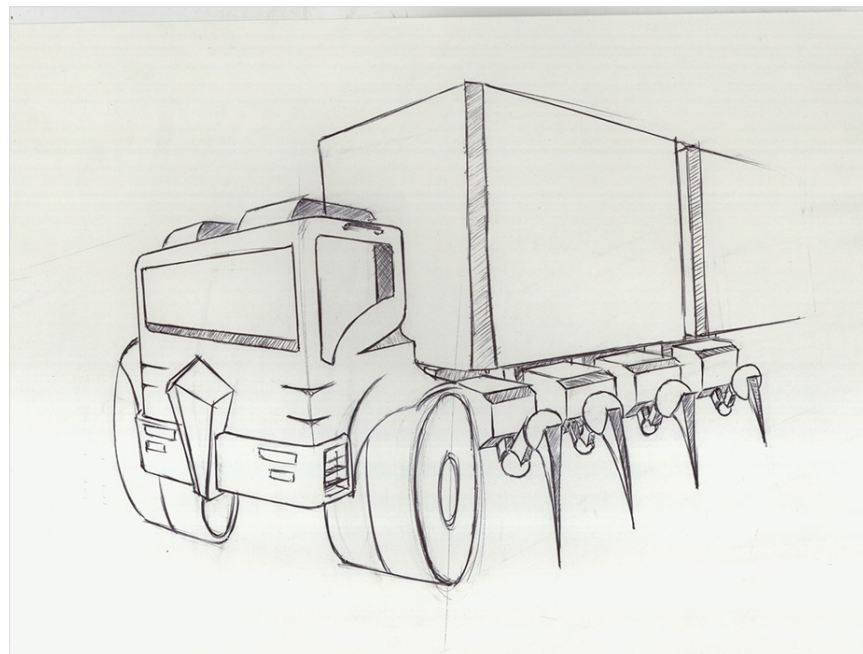
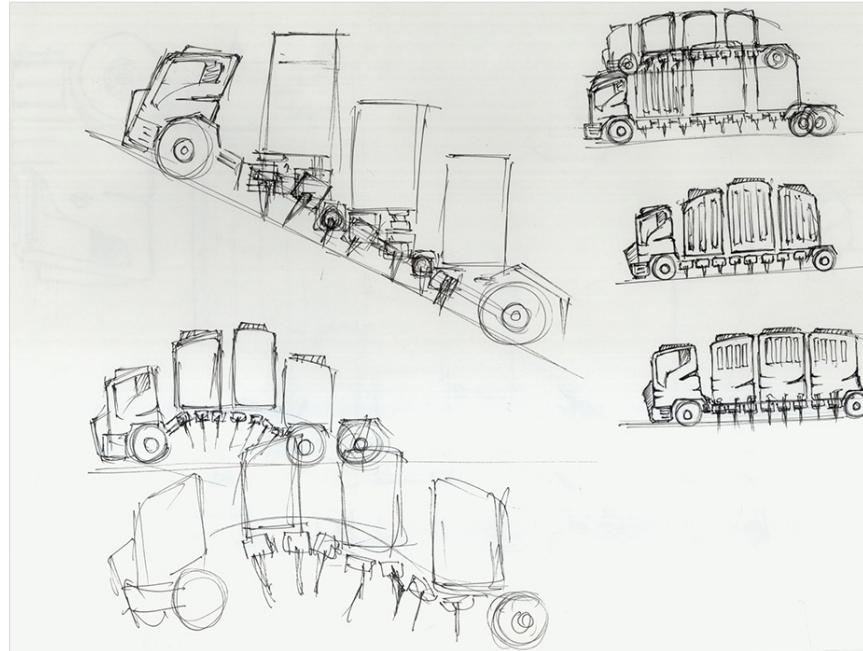
Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/final-hybrid>



1. Introduction

2. Concept Exploration

3. Final Hybrid

4. Transfer to Digital

5. Digital Rendering (On photoshop)

6. Digital Animation (On After Effects)

7. Exporting Final Output

8. Video

9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

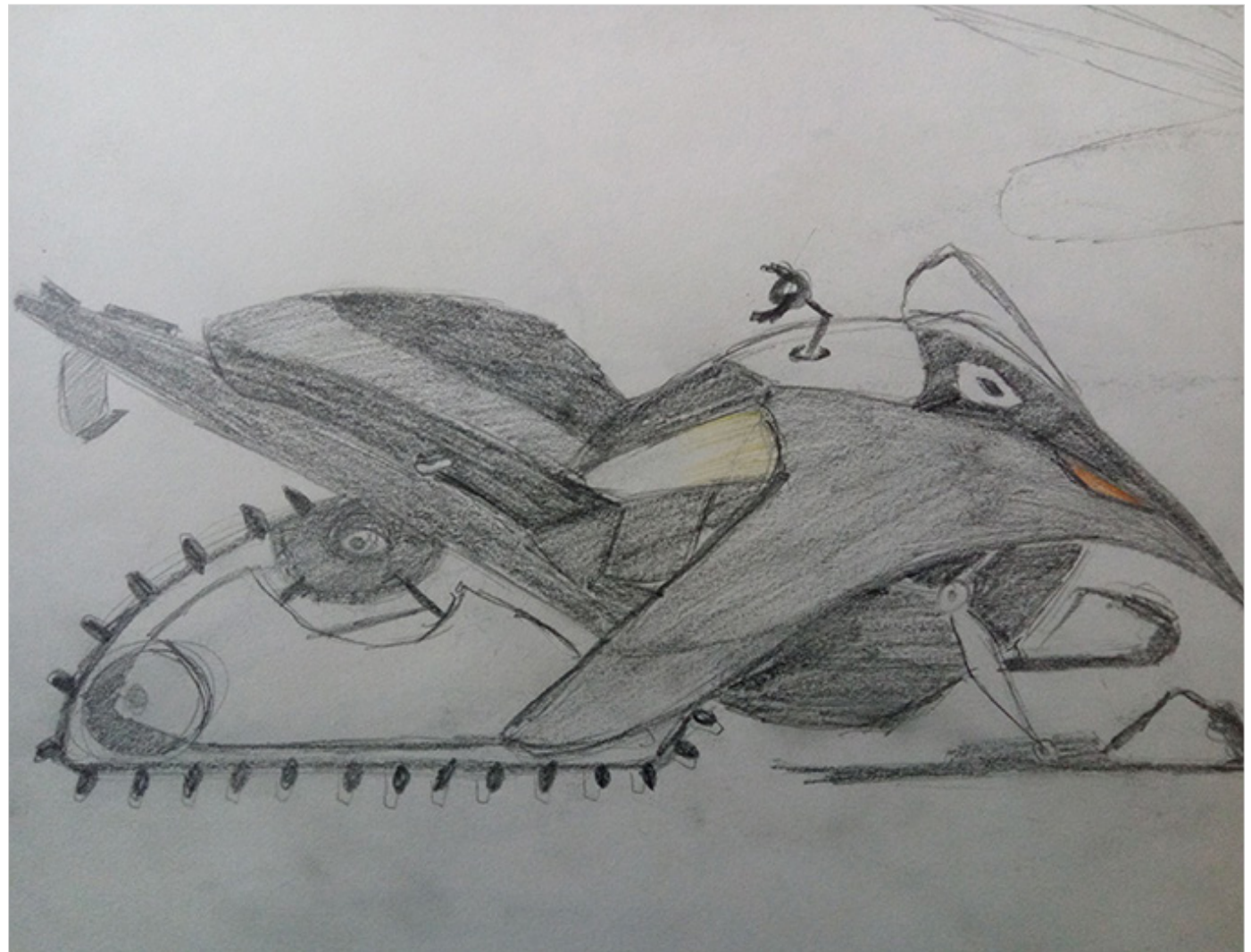
Source:

<https://www.dsource.in/course/digital-representation-technique/transfer-digital>

## Transfer to Digital

We can now scan this image on a high resolution to make sure all the details of our drawing are intact. We can then open this JPEG scanned image on Photoshop and start working on it.

Scanned Image:



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-rendering-photoshop>

## Digital Rendering (On photoshop)

While digitally rendering the image keep in mind the following:



a. Colour: The colour of the creature fused with that of the machine.

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

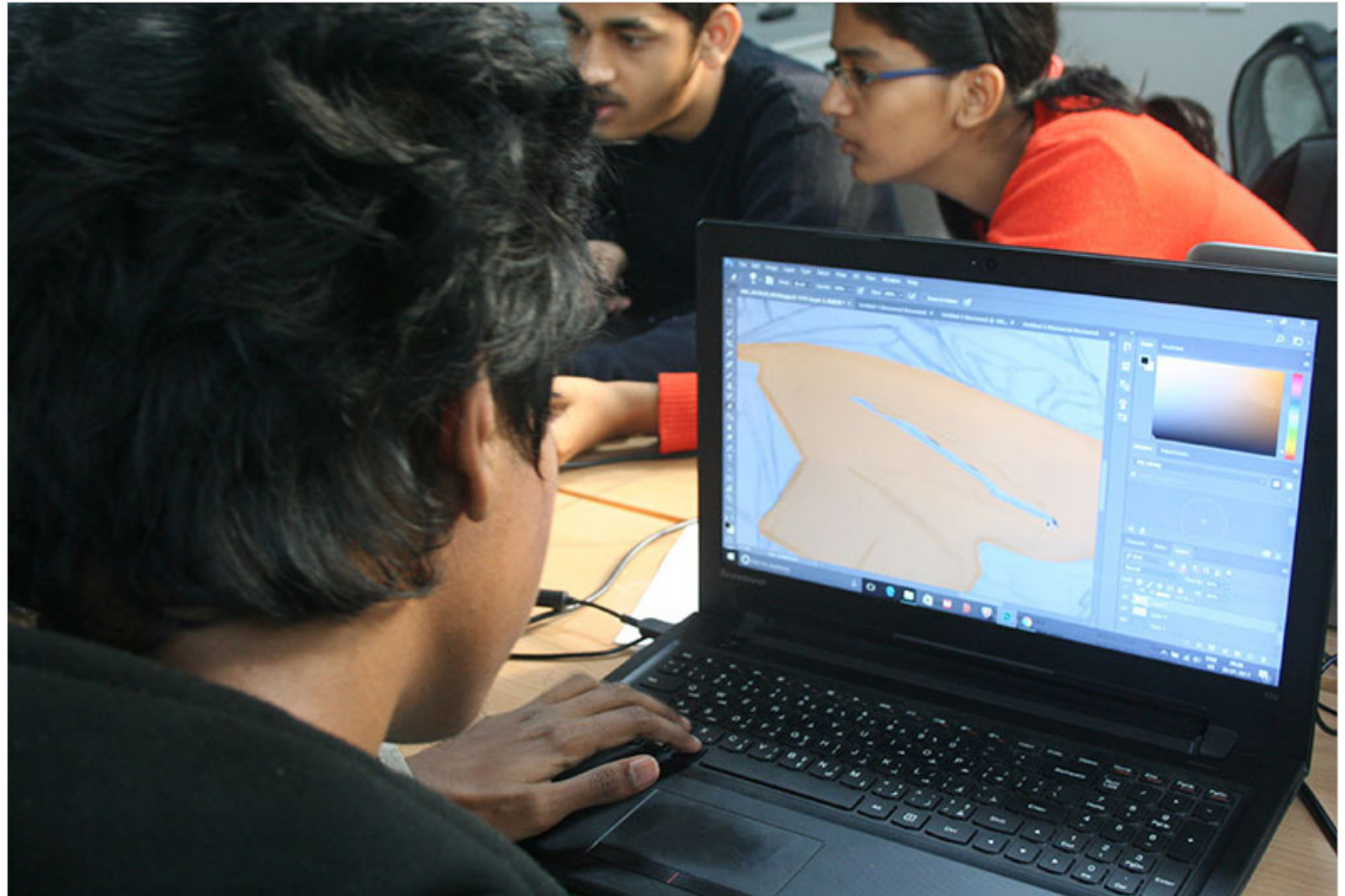
Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-rendering-photoshop>

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



**b. Lighting:** The scene should be well-lit so the features of our hybrid are in focus.



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

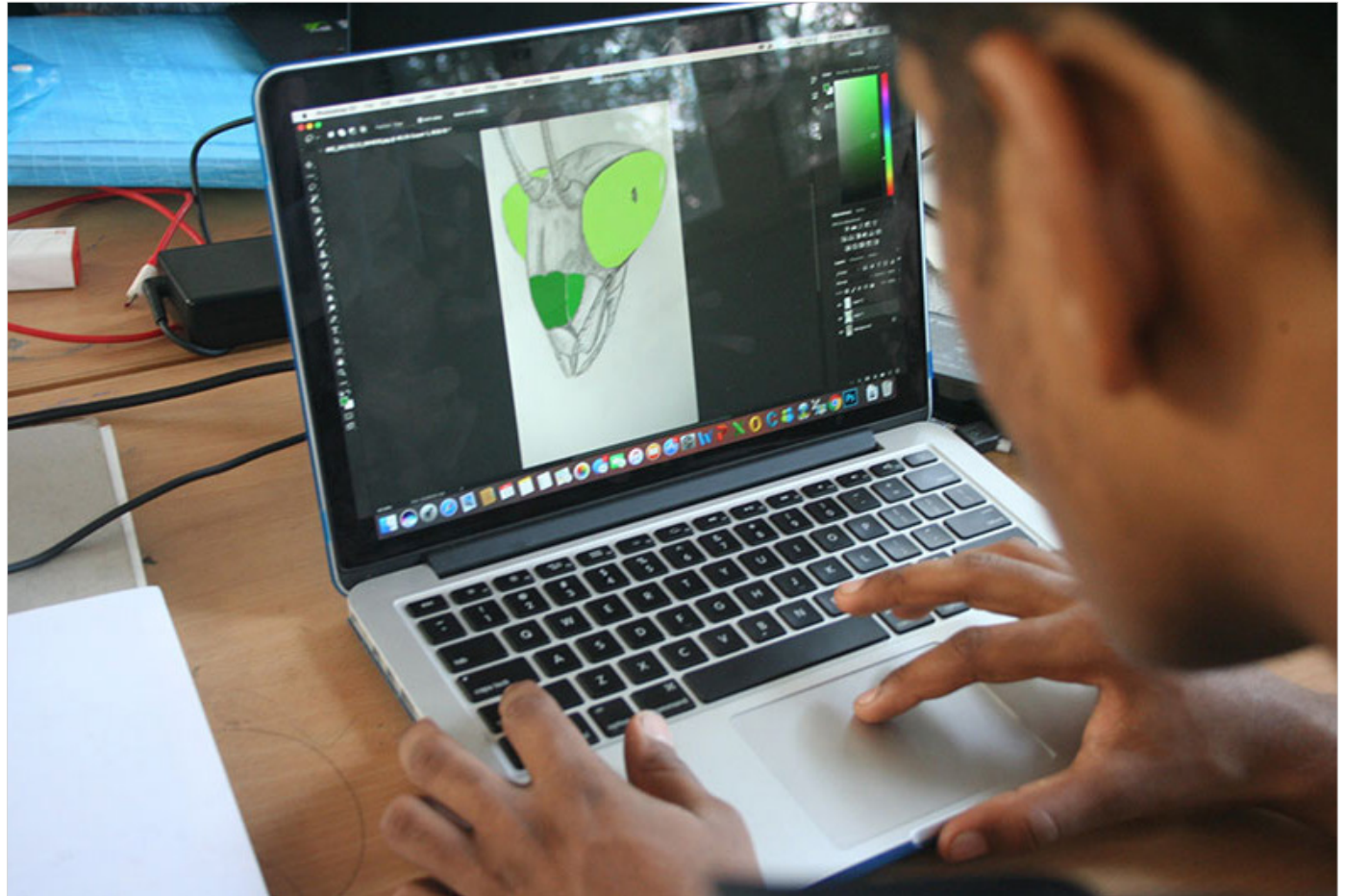
Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-rendering-photoshop>

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



c. Background: Focus on creating a relevant background in the context of the hybrid creature.

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-rendering-photoshop>

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



d. Material: Focus on the right depiction of material (of the machine) and texture (of the animal)



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

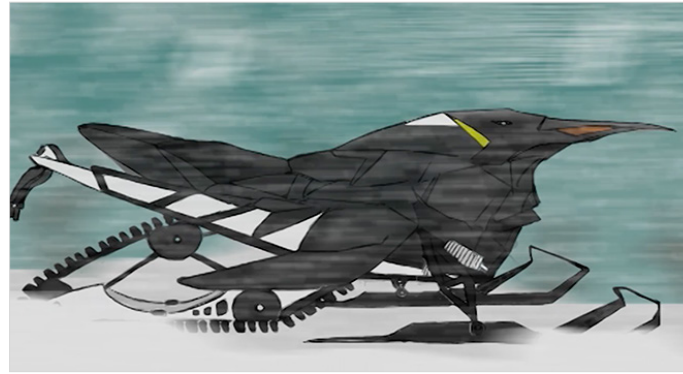
Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

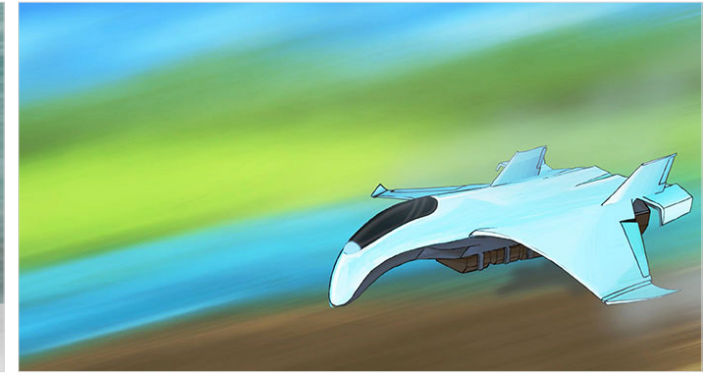
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-rendering-photoshop>



e. Workflow: Draw different moving parts on different layers and name your layers to keep things organised.



f. Final Hybrid Digital Sketch.

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-animation-after-effects>

## Digital Animation (On After Effects)

### a. Assembling the scene:

Now that you have a fair idea of how your final hybrid creature will move, it's time to set up the scene. In the scene, you have to decide how to best display the characteristics of the hybrid and what movements should be brought about. Figure out how to show the hybrid entering or leaving the scene. The action that it will do and how the movements will be. Once decided we use simple methods in After Effects to animate the scene.



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/digital-animation-after-effects>

**b. Workflow:** Make sure all your layers and effects are named and organised in order to access and make changes easily later or by someone else.



1. Introduction

2. Concept Exploration

3. Final Hybrid

4. Transfer to Digital

5. Digital Rendering (On photoshop)

6. Digital Animation (On After Effects)

7. Exporting Final Output

8. Video

9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/exporting-final-output>

## Exporting Final Output

**a. Resolution:** While exporting the final file in a video format keep in mind the resolution of the exported video. Full HD (1920x1080) is the most common ratio followed worldwide.

**Size:** Various file extensions will have different sized outputs. MP4 is the most sought after file format that allows good resolution and not very heavy files, unlike AVI or Quicktime.



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/exporting-final-output>

**b. Composing and packaging:** Make sure the video has the title of the work and credits to form a complete package.



1. Introduction

2. Concept Exploration

3. Final Hybrid

4. Transfer to Digital

5. Digital Rendering (On photoshop)

6. Digital Animation (On After Effects)

7. Exporting Final Output

8. Video

9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/exporting-final-output>

Final Output.



1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details



Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform

by

Neha Alice Kerketta, Vajra, Pranisha and

Chamandeep

IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/video>

## Video



Digital Representation Technique - Hybrid Animation

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details

Design Course

## Digital Representation Technique

Transforming Tangible Art into a Digital Platform  
by

Neha Alice Kerketta, Vajra, Pranisha and  
Chamandeep  
IDC, IIT Bombay

Source:

<https://www.dsource.in/course/digital-representation-technique/contact-details>

## Contact Details

This documentation was done by Neha Alice Kerketta IDC, IIT Bombay

You can get in touch with her at [neha.alice\[at\]gmail.com](mailto:neha.alice[at]gmail.com)

You can write to the following address regarding suggestions and clarifications:

### Helpdesk Details:

Co-ordinator  
Project e-kalpa  
Industrial Design Centre  
IIT Bombay  
Powai  
Mumbai 4000 076  
India

Phone: 091-22-2159 6805/ 091-22-2576 7802

Email: [dsource.in\[at\]gmail.com](mailto:dsource.in[at]gmail.com)

1. Introduction
2. Concept Exploration
3. Final Hybrid
4. Transfer to Digital
5. Digital Rendering (On photoshop)
6. Digital Animation (On After Effects)
7. Exporting Final Output
8. Video
9. Contact Details