

# **BOOK COVER TEMPLATE**

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## **3D Digital Studio: Edition Two**

In this book, I cover the theory, practice, and purpose related to the production of 3D animation and beyond. Included are projects, exercises, lectures, and tutorials meant to help students of the subject grow and be put on a pathway for mastery.

## Hosting on Github Pages

1. Fork this repository
2. Create a branch called `gh-pages`
3. Enable Pages to deploy from `gh-pages` branch.
4. Make sure Actions have permission to run on this repo. `gitbook_action.yml` workflow will automatically publish a Gitbook on the `gh-pages` branch.

## Updating a new book

Modify the following files:

- Configuration settings: `book.json`
- Table of contents: `SUMMARY.md`
- `cover.jpg`, `cover_small.jpg` (`cover.jpg` is published as the cover image in the PDF export generated by `.github/workflows/gitbook_action.yml` )
- `LICENSE.md`

## Installing gitbook cli

Requirements: NodeJS v4 and above

```
npm install -g gitbook-cli
```

## Local development

Install local development dependencies: `bundle install`

Install gitbook plugins: `gitbook install`

Build the static website using: `gitbook build`

Build and serve on localhost: `gitbook serve`

**Note:** PDF and eBook files generate via github action, and not the Gitbook generator, therefore, PDF files will be unavailable in local development.

# **Animation Project**

For this project, you will

## **Theme Overview**

## **Project Format**

## **Production**

### **Demo**

### **Rendering**

## **Work Statement**

## **Constraints and expectations**

## **Learning objectives**

## **Inspiration**

# Career

## Animation, VFX, and Game Industry

**Talk to mentors:** [Getting development advice contacts list](#)

### Job Postings

Chris Mayne curates what might be the the most comprehensive job posting resource available. See his [Google spreadsheet](#) below.

- [Animation, VFX, and Game Industry Job Postings](#) curated by Chris Mayne
- [Adobe Behance.net Jobs List](#)
- [SIGGRAPH 2021 Job Fair](#)

### Conferences

- [SIGGRAPH North America](#)
- [SIGGRAPH Asia](#)
- [Game Developers Conference \(GDC\)](#)
- [VIEW Conference \(Italy\)](#)

### Job Resources

- [Job titles in 3D Animation and VFX](#)
- [Why you are not getting a job in VFX, games, and animation](#)

### Magazines and Online Communities

- [Blender.today](#)
- [Art Station](#)
- [Behance](#)
- [CG Society](#)
- <https://www.artofvfx.com/>
- <https://www.awn.com/vfxworld>
- [Animation World Network](#)
- [The Rookies](#)
- [Digital Art Live](#)
- [BlenderArt.org](#)
- [3D Creative](#)
- [Imagine FX](#)
- [3D Artist](#)
- [3D World](#)
- [Character Design Quarterly](#)

### Industry Career Advice

- [Asking for Feedback](#)
- [Becoming a VFX artist](#)
- [Working as a 3D FX Artist with Mattia Rodini](#)
- [Working as a Concept Artist with Gaëlle Seguillon](#)
- [Working as a 3D Animator with Ian Lade](#)
- [Working as an Environment Artist for a Game Studio with Enguerrand Michelin](#)

- [Working as a Lighting TD by Dennis Müller](#)
- [Working as a Character Artist on Fortnite at Epic Games](#)
- [Working as a CG Supervisor with Laura Hohman](#)

## Contests and Challenges

- <https://cgboost.com/challenge/>
- <https://www.cgtrader.com/digital-art-competition>
- <https://www.artstation.com/contests>
- <https://renderman.pixar.com/challenges>
- <https://www.therookies.co/contests>
- <https://www.11secondclub.com/>
- <https://www.awn.com/call-entries> ANimation

## Themed Entertainment

- [Themed Entertainment and Educational Resources managed by MK Haley](#)
- [Themed Entertainment Association](#)

## Multi-disciplinary and Product Design Resources

- [Multidisciplinary Design Studios in the United States](#)
- [Core77 Industrial Design Online Magazine](#)

## Contests and Awards

- <https://designawards.core77.com/>



## Community

Find your people!

## Local Events

[Happy Valley Animation Festival](#)

## Conference Volunteering

- [SIGGRAPH SV Program](#)
- [IDGA](#)

## Groups

- Penn State University Park: [Penn State Digital Media Group](#)
- Penn State World Campus: [DMD Program Club](#)
- [Meetup.com](#)
- [3D Modeling and Animation Facebook Group](#)
- [ACM SIGGRAPH Facebook Group](#)
- [SIGGRAPH S3 Facebook Group](#)

## Animation societies

- [ASIFA International](#)
- [ASIFA South](#)

## Underrepresented groups

- [Women in Animation:](#)
- <http://greatwomenanimators.com/>
- [Black Women Animate Studios](#)
- [Trans, Non-binary Motion Graphics Artist Directory](#)

## 3D artists and studios

- [M\\_Plummer-Fernández](#)
- [Universal Everything](#)
- [Zeitguised](#)
- [Al and Al](#)
- [Albert Omoss](#)
- [Alex McLeod](#)
- [Barry Doupe](#)
- [Claudia Hart](#)
- [Chris Landreth](#)
- [Cool 3D World](#)
- [Dave Fothergill](#)
- [Dave Stewart](#)
- [El Popo Sangre](#)
- [Eva Papamargariti](#)
- [Filip Tarczewski](#)
- [Geoffrey Lillemon](#)
- [Jacolby Satterwhite](#)
- [Jesse Kanda](#)
- [John Butler](#)
- [Jonathan Monaghan](#)
- [Jun Seo Hahm](#)
- [Kim Laughton](#)
- [Kouhei Nakama](#)
- [LuYang](#)
- [Mike Pelletier](#)
- [Pussykrew](#)
- [Rick Silva](#)
- [Flavourcel Animation Collective](#)
- [Nikita Diakur](#)

## Recommended Plugins

### Hard surface modeling

HardOps/Boxcutter + Fluent

### Texturing

- PBR Bridge
- UV Packmaster
- UV Squares
- Node Wrangler(included),

### Simulation

- HumanGen
- Simply Cloth
- Flip Fluids
- RBD Lab

# Rendering Resources

## Rendering for photorealism

To achieve photo-realistic rendering, you should follow a physically-based rendering (PBR) workflow. This typically requires the use of a render engine that supports PBR surface shader materials such as the Principled BSDF material available in Blender 2.8+. Physically based materials use real-world measurements of a material's various properties. If you use these properties to configure your materials in 3D, you will theoretically get accurate rendering results. Here is a repository of materials property measurements you can use as a reference:

[Physically based material library](#): A database of physically based values for CG artists

There are a great many considerations for achieving realism within renders. Will Gibbons has put together an extensive list of ways to improve the realism of renders on his website, <https://www.willgibbons.com/realistic-rendering/>.

## Textures and texture packs

- [CC0 Textures](#)
- [FreePBR.com](#)
- [CG Bookcase](#)
- [3D Textures](#)
- [Textures.com](#)

## HDRI lighting environment textures

- [HDRI environment textures](#)