

Hi, I'm

# Dhruv Govil

[dhruvagovil@gmail.com](mailto:dhruvagovil@gmail.com)

+1 604 202 3501

[www.dgovil.com](http://www.dgovil.com)

Vancouver, Canada

Software Engineer  
3D Artist  
UI & UX Designer

Feature Film  
Realtime Graphics  
AR & VR  
Full Stack Web

## Skills

### Languages

Python  
C++  
Swift / Objective-C  
Rust  
C#  
GLSL , MSL  
Lua  
Javascript

### Frameworks & APIs

Qt , PySide , PyQt  
SwiftUI  
OpenGL , Metal  
RealityKit  
Pixar USD

### Software

Maya  
Houdini  
Katana  
Nuke  
Substance Designer & Painter  
Reality Composer  
Unity  
Unreal Engine  
Blender

I'm a developer, artist and designer with extensive experience in both Film and Realtime computer graphics.

I've worked in a variety of roles being a 3D Artist and Software Engineer, with a heavy focus on UI and UX design.

I combine my range of skills to create compelling software and content for both consumers and content creators.

## Experience

### Content Pipeline Architect, Augmented Reality, Apple

February 2020 - Present

- Co-Created **App Clip Codes**, a new visual marker launched with iOS 14. Responsible for creating generation algorithm, initial visual designs and demos for leadership.
- Responsible for architecting content creation pipelines to our realtime editor and engine. Included development of asset management and versioning tools, as well as procedural workflow builders.
- Shepherded and developed multiple USD initiatives, in conjunction with multiple teams at Apple. In charge of Apple's contributions to **Maya USD**.
- Provided technical consultancy to several projects across Apple, using multiple engines and technology stacks, including RealityKit and Unity.
- Worked as and with UI/UX designers to create intuitive artist and engineering workflows.
- Awarded design and rendering patents for innovations in AR / VR.

### Lead Technical Artist, Augmented Reality, Apple

August 2018 - February 2020

- Responsible for creating UI, UX and Art Content for multiple projects. Includes creating interface design, interaction design, asset modelling, lighting, shading, rigging and animation.
- Created concept art , software prototypes , presentations and video productions for Apple leadership.
- Awarded Augmented Reality content, rendering and simulation patents.
- Developed Augmented Reality applications using RealityKit and Swift, as well as Unity and C#.
- Developed several AR applications as both an artist and engineer.
- Provided training sessions to artists and engineers.

## Crewed Shows

Smallfoot  
Spider-Man: Homecoming  
Suicide Squad  
Alice: Through the Looking Glass  
Smurfs: The Lost Village  
Guardians of the Galaxy  
Hotel Transylvania 2  
The Amazing Spider-Man 2  
Blended  
Cloudy with a Chance of Meatballs 2  
Percy Jackson and the Sea of Monsters  
R.I.P.D  
Seventh Son

## Contributing Shows

Spider-Man: Into the SpiderVerse  
The Emoji Movie  
Storks  
Hotel Transylvania 3  
Love, Death and Robots: Lucky 13  
The Angry Birds Movie  
The Interview

## Notable

### SIGGRAPH 2017 Presenter

Deep Compositing tools for Animation Collaboration

### On Set Production

Assistant Camera Operator and Gaffer

### Educational Content

Authored Python for Maya course on several platforms with 7000+ students.

### Open Source Development

Developed several projects used by multiple studios globally.

## Education

### Vancouver Film School

Studied 2D and 3D Animation

### Rigging Dojo

C++ for Maya

### iAnimate

3D Animation

## Experience

### Pipeline and Layout Supervisor, Sony Pictures Imageworks

October 2016 - August 2018

- Developed and maintained critical Pipeline software for all active shows in production.
- Oversaw a team of Pipeline TD's and Layout Artists on Visual Effects and Animated Features
- Developed new Shot Review and Approval Pipeline with 100x improvement in performance using a new frontend and server architecture.
- Co-Developed a Virtual Production system with tracked virtual cameras, a motion capture stage and Virtual Reality asset/scene reviewing.
- Created a Proof of Concept port of our pipeline to use Pixar USD
- Developed a bespoke pipeline to Unity for an **Augmented Reality Project**

### Pipeline and Layout, Varying Seniority, Sony Pictures Imageworks

January 2013 - October 2016

- Production software development and artist support on VFX and Animation shows.
- Handled camera, plate and scene layout on a mix of VFX and full CG Shots and sequences.
- Co-Developed new Shot Publishing and Validation toolset used by all productions
- Developed a Deep Compositing toolset for fast animation collaboration with multiple animators or split up scenes.
- Created a dynamic scene origin plugin for Maya and a full pipeline integration to handle large scale scenes.
- Wrote a procedural muscle simulation pipeline with **Ziva** to significantly reduce required Character FX resources.
- Developed Motion capture ingestion pipeline.

### Animation Support TD & Scene Layout, Rhythm & Hues

June 2012 - January 2013

- Responsible for layout and pre-lighting of VFX scenes.
- Assist animators with scenes, rigs and scripts.
- Develop tools for in house tool, Voodoo, with proprietary language, Parsley.
- Responsible for department in Vancouver, and training new hires.
- Develop artist color management pipeline.
- Developed Scene lighting management tools
- Created prototype Python bindings and an IDE for Parsley.
- Wrote tools to streamline ticket submission and management.