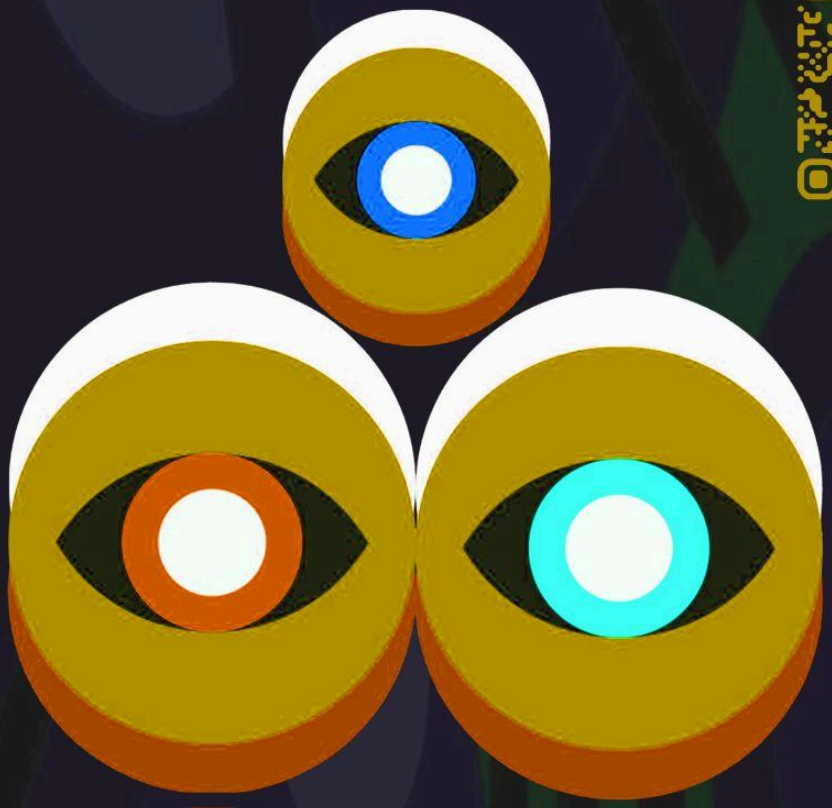
From: Institute Of Digital Arts Jamaica

ARTIFICIALLY GENERATED ANIMATION FILM PRODUCTION

(Non-Photorealistic Rendering [NPR])
(Titan Edition)



Written by: Israel Andrew Brown
Email: israelandrewbrown@proton.me

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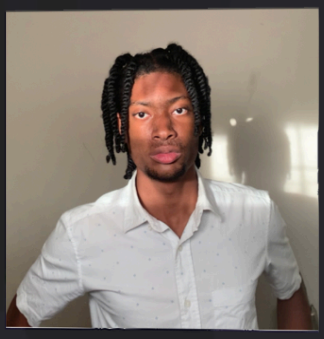
Israel Andrew Brown

Art Director | Film Director | NPR Generalist | A.I Film Prompt Engineer



Contact Information:
Location:
Jamaica W.I.

Email: israelandrewbrown@proton.me
Website: israelandrewbrown.com

Awards and Recognition:
- JCDC Gold - Visual Arts Competition
- Cecil Cooper Foundation Bursary
- Heart NTA/TVET Scholarship
- Chase Scholarship

Skills:
Story Development (Ollama) (OpenWebUI)
- Deepseek R1

Concept Development (Comfy UI)
- Image Generation (Stable Diffusion 1.5)
- Image Generation (Flux 1 Schnell)

Audio Development (Pinokio)
- Expressive Voiceover (zonos-tts)
- Music Production (audio-to-audio) (YuE)
- Sound Effects (Stable Audio Open 1.0)

Prop Development
- Photogrammetry (Meshroom)
- 3D Model Reconstrcution (Hunyuan3D 2.0)
- Texturing (Stable Projectorz)
- Krita v5.3

Motion Capture Development
- Blender v3.0-v4.0
- Face Landmarker Link V0.2
- FreeMoCap v1.5

Hobbies and Interests:
- Chess
- Culinary Arts

Who Am I?

I, Israel Andrew Brown, am a dedicated creative professional specializing in art direction, film direction, Non-photorealistic Art, and Artificially Generated Art. My passion lies in transforming ideas into visually compelling and functional designs and film that tell stories, solve problems, and inspire innovation.

Artist Statement

I am driven by a vision to educate and empower others through the integration of open-source tools, software and artificial intelligence (edge A.I.) in creative industries. By leveraging these technologies, I aim to make high-quality design resources more accessible and foster a community of innovators who embrace technology to redefine artistic boundaries.

Qualifications

- Bachelor of Fine Arts in Animation (expected graduation: 2027)
  Edna Manley College of the Visual and Performing Arts
- Associate of Arts in Humanities – Visual Communication (expected: 2025)
  Caribbean Examination Council (CXC)
- Associate of Science – Industrial Technology (expected: 2025)
  Caribbean Examination Council (CXC)
- Associate of Science – Information and Communication Technology (expected: 2025)
  Caribbean Examination Council (CXC)

Core Values and Philosophy

I am passionate about advocating for the use of free and open-source software (FOSS) as a cornerstone of creativity, education, and innovation. By championing tools like FreeMoCap, Blender, and Krita, I aim to demonstrate the power of accessible software in filmmaking, animation, and design education. These tools provide opportunities for creators to explore their potential without financial barriers, fostering a culture of inclusivity and collaboration.

Key Accomplishments

I look forward to contributing to the creative community by developing educational resources, participating in collaborative projects, and showcasing how open-source tools can revolutionize artistic workflows.

Professional Goals

- To refine my expertise in animation, graphic design, and 3D modeling through academic and practical experiences.
- To become a leading advocate for the integration of open-source tools in creative education and professional practices.
- To establish workshops and online platforms that empower individuals to use tools like Blender, FreeMoCap, and Krita for their creative pursuits
- To collaborate with global communities in developing innovative projects that merge art, technology, and storytelling.

Made with "Krita 5.3"

(ANM00) Animation - Artificially Generated Film Production

Programme : Independent Animation Film Production
Department : Film
Prerequisite : CSEC® (Literature, Visual Arts, Theatre Arts, Music, Technical Drawing)
(CAPE® Performing Arts Unit 1 and 2 or satisfactory demo-reel/interview)
Type Of Course : Animation
Course Title : “Animation - Artificially Generated Animation Film Production”
Course Code : ANM00
Credits : 3
Year : Four (4)
Semester : Two (2)
Duration : 1 Semester, 15 weeks, 60 hrs (3 hrs per week)

Lecture Redistributor : Israel Andrew Brown / Email: israelandrewbrown@proton.me
Website. : github.com/israelandrewbrown/Artificially-Generated-Animation-Film-Production

Description :
This course leverages free and open-source artificial intelligence models and software to produce an animated short film. Building on foundational film composition (storytelling, storyboarding, animatics, and video editing skills), students will learn methods in artificial digital asset generation. Explore AI's role in streamlining 3D animation production pipelines. Understand and utilize 3D animation production techniques to effectively create, manage and compose artificially generated digital assets into a film. Troubleshoot common AI-related issues in animation film production.

Recommended Material : Laptop, Graphics Tablet, Graphics Pencil, <50 mbps internet, Room, Microphone 4 WebCam, 4 USB Cable, 3 Three Tripods, 1 Charuco Board, 1 Helmet (relevant) HDMI-HDMI Cable, Video Capture Card, Edge Artificial Intelligence (local compute)

Edge A.I. Options () :(NVIDIA® Project DIGITS)(NVIDIA® GeForce® RTX 3070 ≤8gb)(MacOS [M2][M3][M4])

Objectives :

1. Understand and utilize 3D animation production techniques to effectively generate, manage, & compose artificially generated digital assets into a film.

2. Understand how artificial intelligence models can address and resolve inefficiencies in 3D animation pipelines, improving overall productivity. Identify, analyze, and resolve common issues arising from the use of artificial intelligence in film production.

3. Understand the limitations of automation in animation and film production, recognizing which roles are more challenging to automate and why.

Course Assessment: Please note, knowledge gained from this course will be assessed in the . .. “(PRJ00) Project – Individual Project” by its receptive examiner.

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This course material is intended for educational use and is based on the author's current understanding of the subject matter. While the author has taken reasonable steps to ensure the accuracy of the information presented, the rapidly evolving nature of artificial intelligence and film production means that some details may become outdated. The information in this book is distributed on an “As Is” basis without warranty. While every precaution has been taken in the preparation of the book, the author shall not have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this book or by the operating systems, large language models, image diffusion models, computer vision models, computer software and hardware products described in it.

Week One
What is a film? What is “animation” and “twelve principles of animation”? What is “perspective”?
What is the “animation pipeline”? What are the occupations on the “animation pipeline”?
How to make “paper” and “charcoal” from wood? How to make “a wooden recorder”? How is “bronze” forged?

Week Two
What is an algorithm? What is “Artificial Intelligence"? What is “software user documentation”?
What is a Large Language Model (LLM)? What is stable diffusion? What is computer vision?
What is a workstation? What is an operating system? What is hardware and software?
What is “free and open source”.? What are free and open source software licenses?
What are the file formats [(.jpeg) (.stl)(.usd) (.ogg)(.FLAC) (.srt) (.csv) (.openEXR) (.mkv)] used for?

Week Three
What is “Edge Artificial Intelligence"? How to set up an “Edge Artificial Intelligence" workstation?
How to install relevant “free and open-source” models and software? ([Ollama] [pinokio.computer])

Week Four-Five
(Lecture) Composition Development (what-ai-cannot-do) (Blender 4.0) (Krita 5.2)
(Tutorial) (Animatics, 2DFX[Fog, Smoke, Fire, Water, Particles], VFX Compositing, Video Editing)

(WebUI[Gradio])(Pinokio)(ollama)

Week Six
(Lecture) Story Development
(Tutorial) Character / Story Structure (OpenWebUI [deepseek R1])

Week Seven
(Lecture) Concept Development
(Tutorial) Visual Concept [Characters][Props][Set] (Flux 1-Schnell)

Week Eight to Nine
(Lecture) Audio Development
(Tutorial) Expressive Voice Over (Text-to-Speech) (zonos-v0.1)
(Tutorial) Voice Changer (RVC)
(Tutorial) Subtitles (Whisper)
(Tutorial) Music Design (Audio-to-Audio) (YuE[ICL]) (DiffRhythm)
(Tutorial) Split Instrumentals/Vocal (Ultimate Vocal Remover V5)
(Tutorial) Audio-to-MIDI (NeuralNote[Spotify-Basic-Pitch])
(Tutorial) Sound Effects (Stable Audio Open 1.0)

Week Ten
(Lecture) Prop Development (krita-ai-diffusion)
(Tutorial) Image-to-3dMesh [Characters][Props][Set] (Hunyuan 3D-2)(Trellis)(TripoSr)
(Tutorial) Image-to-Map-to-3dMesh [Set] (DepthAnythingV2)

Week Eleven
(Lecture) Look Development
(Tutorial) Image Texture Generation [Characters][Props][Set] (Stable Diffusion 2.1)

Week Twelve
(Lecture) Motion Development
(Tutorial) “Face” - Motion Capture (FaceLandmarkerLinkV0.2)
(Tutorial) “Body” - Motion Capture (FreeMoCap v1.5)
(Tutorial) Extras (Image-to-Video) (Wan 2.1)

Week Thirteen to Fifteen :
(Tutorial) Troubleshooting common issues and using AI to optimize the production of a short film.
(Critique) Showcase and review of completed projects.

Review : https://github.com/israelandrewbrown/Artificially-Generated-Animation-Film-Production
Donate Bitcoin : **bc1qdjsljjzj4x83v28ks0l3cvwdkqvhyfggzc2w8v**

Resources

israelandrewbrown.
“GitHub - Israelandrewbrown/Artificially-Generated-Animation-Film-Production: Animation Film Production.” *GitHub*, 2025, https://github.com/israelandrewbrown/Artificially-Generated-Animation-Film-Production.

“Artificially Generated Animation Film Production“ *Youtube*, created by Israel Brown, February 02, 2025 https://www.youtube.com/playlist?list=PL4ouDzfxGIYQK1rhavaAFrcFhmsT137EK Accessed February 02, 2025

Artificially Generated Animation Film Production
Official Youtube® Playlist (115 videos) (30 hours)
Alternatively, scan the QR Code to access the above course:

Donate Bitcoin : bc1qdjsljjzj4x83v28ks0l3cvwdkqvhyfggzc2w8v

Official Discord® Server
discord.gg/unXGVPgH

SCAN ME

Bibliography

freeCodeCamp.org. “Prompt Engineering Tutorial – Master ChatGPT and LLM Responses.” *YouTube*, 5 Sept. 2023, https://www.youtube.com/watch?v=_ZvnD73m40o&ab_channel=freeCodeCamp.org Accessed 11 Feb. 2025.

Tyler Edlin. “Mastering the Design Pipeline.” *YouTube*, 14 Dec. 2024, https://www.youtube.com/watch?v=_15SIWLGQEU&ab_channel=TylerEdlin. Accessed 11 Feb. 2025.

Tyler Edlin. “The BEST Environment Design EXERCISE for BEGINNERS.” *YouTube*, 1 Mar. 2019, https://www.youtube.com/watch?v=mhvtuZlEV_Q&ab_channel=TylerEdlin. Accessed 11 Feb. 2025.

Tyler Edlin. “DESIGN BETTER CHARACTERS : Essential Fundamentals.” *YouTube*, 11 Oct. 2024, https://www.youtube.com/watch?v=9AgGCtfbuLs&ab_channel=TylerEdlin Accessed 11 Feb. 2025.

MTM College. “Intro to Environment Design with Donna Johnson.” *YouTube*, 19 Nov. 2024, https://www.youtube.com/watch?v=mfikIFOBowA&ab_channel=MTMCollege. Accessed 11 Feb. 2025

MTM College. “How to Design Props & Sets That Tell a Story!” *YouTube*, 4 Feb. 2025, https://www.youtube.com/watch?v=69pQq_OndQA&ab_channel=MTMCollege. Accessed 11 Feb. 2025.

MTM College. “Colour and Light for Environments with Donna Johnson.” *YouTube*, 15 Jan. 2025, https://www.youtube.com/watch?v=R33pofqY9vQ&ab_channel=MTMCollege. Accessed 11 Feb. 2025.

MTM College. “Mastering Comic Page Design: How to Craft Dynamic Comic Pages.” YouTube, 21 Feb. 2025, www.youtube.com/watch?v=Iq_uzkEwCOk. Accessed 21 Feb. 2025.

MTM College. “Blender Basics: Master 3D Modeling in This Masterclass with Sonia Gutierrez.” *YouTube*, 23 Dec. 2024, https://www.youtube.com/watch?v=y8dJvttK4fg&ab_channel=MTMCollege. Accessed 11 Feb. 2025.

Woochia - Charly Sauret. “Music Theory COMPLETE Course - EVERYTHING You Need to Know.” *YouTube*, 16 Feb. 2022, https://www.youtube.com/watch?v=_VvKeiwddPI&ab_channel=Woochia-CharlySauret. Accessed 11 Feb. 2025.

Rokoko. “Everything You Need to Know about MOCAP | Inertial, Optical, AI Rokoko Office Hours.” *YouTube*, 14 Sept. 2023, https://www.youtube.com/live/C_pT_EtZYto. Accessed 11. Feb. 2025.

Jon Matthis. “HMN25-03 - FreeMoCap Data Collection.” *YouTube*, 3 Feb. 2025, https://www.youtube.com/watch?v=ezeMpNFrZ4c&ab_channel=JonMatthis. Accessed 11 Feb. 2025.

“The Six Essential Roles On The New Pipeline”

Director is responsible for designing sets, overseeing construction workers and other artists, and playing a part in figuring out the overall aesthetic of a movie production.

Bendard, Mike. “What Is an Art Director in Film — Job Description Explained.” Studiobinder, 4 July 2024, www.studiobinder.com/blog/what-is-an-art-director-in-film-job-description/.
Accessed 26 Feb. 2025.

A **Technical Artist** (Programmer) helps video game development teams create interactive, visually appealing games for consoles and apps. They use both artistic and coding skills to integrate artwork and animation into complex game systems and film.

“Technical Artist: Definition, Duties, Skills and Salary.” Indeed, 2 July 2024, www.indeed.com/career-advice/finding-a-job/what-is-technical-artist.
Accessed 26 Feb. 2025.

Story	Concept	Audio	Props	Look	Movement

Artificial Intelligence Operator (Developer) is a professional who designs, trains, and monitors AI systems. They work as a liaison between human operators and AI systems, ensuring that AI systems are integrated into existing workflows.

O’Brien, Keith, and Amanda Downie. “AI Workflow.” IBM, 11 Nov. 2024, www.ibm.com/think/topics/ai-workflow.
Accessed 26 Feb. 2025.

An **animatic artist** creates animatics, which are sequences of images, shots, or sketches that are used to plan a video. Animatics are used in many fields, including animation, television commercials, and movie production. Animatics are a technique that comes after storyboarding, and they can help ensure that a project is on track and will be effective. They can be used to: see how the final product might look. Give a rough draft of how a particular idea will play out. Animatics are usually made by editing storyboard images together with dialogue, sound effects, and music.

Dunham, Brent. “What is an Animatic — How To Bring Your Storyboard to Life” *Studiobinder.,* 21 May 2023 https://www.studiobinder.com/blog/what-is-an-animatic-definition/
Accessed 26 Feb. 2025.

VFX Compositing artists is the last piece of the puzzle you need to make effects look realistic. It combines the work of animators, videographers, and special effects artists to create effects that blur the line between fiction and reality.

“What Is VFX Compositing?” Adobe, www.adobe.com/creativecloud/video/hub/guides/what-is-vfx-compositing.html.
Accessed 26 Feb. 2025.

A **video editor** uses scenes, takes, and shots to create a cohesive story for the screen. Editors use continuity editing, cutaways, and transitions to evoke certain emotions from the viewer and properly execute an entertaining plot. Video editors for film cut a scene from different angles, which directs the viewer to certain details in a story.

Staff, Coursera. “What Is Video Editing?” Coursera, 2024, www.coursera.org/articles/what-is-video-editing.
Accessed 26 Feb. 2025.

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israelandrewbrown. “GitHub - Israelandrewbrown/Artificially-Generated-Animation-Film-Production: Animation Film Production.” *GitHub*, 2025, https://github.com/israelandrewbrown/Artificially-Generated-Animation-Film-Production.
“Artificially Generated Animation Film Production“ *Youtube*, created by Israel Brown, February 02, 2025 https://www.youtube.com/playlist?list=PL4ouDzfxGlYQK1rhavaAFrcFhmsT137EK Accessed February 02, 2025

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Generative Artificial Intelligence Models (Software User Documentation)		
Model Name	**License**	**Official Github Repository**
Deepseek R1	*MIT*	https://github.com/deepseek-ai/DeepSeek-R1
Llama 3.2	*Community*	https://github.com/meta-llama/llama3
Flux 1-Schnell	*Apache 2.0*	https://github.com/black-forest-labs/flux
Stable Diffusion 2.1	*MIT*	https://github.com/Stability-AI/stablediffusion
zonos-v0.1	*Apache 2.0*	https://github.com/Zyphra/Zonos
RVC	*MIT*	https://github.com/RVC-Project/Retrieval-based-Voice-Conversion-WebUI
Whisper	*MIT*	https://github.com/openai/whisper
YuE^{ICL} (audio-to-audio)	*Apache 2.0*	https://github.com/multimodal-art-projection/YuE
DiffRhythm (audio-to-audio)	*Apache 2.0*	https://github.com/ASLP-lab/DiffRhythm
Ultimate Vocal Remover	*MIT*	https://github.com/Anjok07/ultimatevocalremovergui
Spotify-Basic-Pitch	*Apache 2.0*	https://github.com/spotify/basic-pitch
Stable Audio Open 1.0	*Stability AI Community*	https://github.com/Stability-AI/stable-audio-tools
krita-ai-diffusion	*GPL-3.0*	https://github.com/Acly/krita-ai-diffusion
DepthAnything V2	*Apache 2.0*	https://github.com/DepthAnything/Depth-Anything-V2
Tencent-Hunyuan 3D-2	Tencent *Community*	https://github.com/Tencent/Hunyuan3D-2
Trellis	*MIT*	https://github.com/microsoft/TRELLIS
TripoSr[low-quality] (MacOS)	*MIT*	https://github.com/VAST-AI-Research/TripoSR
Wan 2.1 (Image-to-Video)	*Apache 2.0*	https://github.com/Wan-Video/Wan2.1
Mediapipe	*Apache 2.0*	https://github.com/google-ai-edge/mediapipe
OpenCV	*Apache 2.0*	https://github.com/opencv/opencv

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israelandrewbrown. “GitHub - Israelandrewbrown/Artificially-Generated-Animation-Film-Production: Animation Film Production.” *GitHub*, 2025, https://github.com/israelandrewbrown/Artificially-Generated-Animation-Film-Production.
“Artificially Generated Animation Film Production“ *Youtube*, created by Israel Brown, February 02, 2025 https://www.youtube.com/playlist?list=PL4ouDzfxGlYQK1rhavaAFrcFhmsT137EK Accessed February 02, 2025

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Demonstration Spaces (Software As A Service [SaaS])	
Model Name	**Links**
Deepseek R1 70b	https://chat.deepseek.com/
Llama 3.2 70b	https://www.meta.ai/
Flux 1 Schnell	https://huggingface.co/spaces/black-forest-labs/FLUX.1-schnell
Stable Diffusion 2.1	https://huggingface.co/spaces/stabilityai/stable-diffusion
zonos-v0.1	https://huggingface.co/spaces/Steveeeeeeen/Zonos
RVC	https://huggingface.co/spaces/Clebersla/RVC_V2_Huggingface_Version
Whisper	https://huggingface.co/spaces/openai/whisper
YuE^{ICL} (audio-to-audio)	https://huggingface.co/spaces/innova-ai/YuE-music-generator-demo
DiffRhythm (audio-to-audio)	https://huggingface.co/spaces/ASLP-lab/DiffRhythm
Ultimate Vocal Remover V5	https://github.com/Anjok07/ultimatevocalremovergui *runs on cpu or gpu
Neural Note [SpotifyBasicPitch]	https://github.com/DamRsn/NeuralNote | https://github.com/kushview/element
Stable Audio Open 1.0	*runs-on-high-grade-hardware (≤8gb vram)
krita-ai-diffusion	https://github.com/Acly/krita-ai-diffusion
DepthAnything V2	https://huggingface.co/spaces/depth-anything/Depth-Anything-V2
Tencent-Hunyuan 3D-2	https://huggingface.co/spaces/tencent/Hunyuan3D-2
Trellis	https://huggingface.co/spaces/JeffreyXiang/TRELLIS
TripoSr[low-quality](MacOS)	https://huggingface.co/spaces/stabilityai/TripoSR
Wan 2.1 (Image-to-Video)	*runs-on-high-grade-hardware (≤8gb vram)
FreeMoCap	https://github.com/freemocap/freemocap *runs-on-low-grade-hardware (≤4gb ram)
Face_LandMark_Link	https://github.com/Qaanaaq/Face_Landmark_Link *runs-on-low-grade-hardware (≤4gb ram)
*These links are subject to deactivation by their respective owners.	(accessed February 11, 2025)

Useful Links *(Compatible with "Blender 4.0" "Krita 5.2")*
https://drive.proton.me/urls/G56G4M5C9R#RxYnZ4MHGMXX

StoryLiner (Animatics) *(MIT Licence)* https://blendermarket.com/products/storyliner	**SaveSelection**(Export-Import[.blend]) *(GPL-3.0 license)* https://github.com/riouxr/SaveSelection

PolyQuilt (Retopology) *(GPL-3.0 license)* https://github.com/AIGODLIKE/PolyQuilt	**QRemeshify** (QuadRemesh) *(GPL-3.0 license)* https://github.com/ksami/QRemeshify/releases/tag/1.1.0
OkTopo (Face Retopology) *(MIT Licence)* **unreleased (coming soon)*	**UnWrapMe / AutoUV** (UV Unwrapper) (custom license) https://www.quelsolaar.com/ministry_of_flat/

fSpy (Projection) *(GPL-3.0 license)* https://fspy.io/ | https://github.com/stuffmatic/fSpy-Blender	**DeepBump** (Image-toNormalMap) *(GPL-3.0 license)* https://github.com/HugoTini/DeepBump
Zform (Map-toMesh) *(MIT Licence)* https://blendermarket.com/products/zform	**Depth Map Batch** (Image-to-DepthMap) *(MIT Licence)* https://blendermarket.com/products/depth-map-batch-for-images

Stable Projectorz (custom license) **https://stableprojectorz.com/**	**Dream Textures** [NVIDIA-only] (Set) *(GPL-3.0 license)* https://github.com/carson-katri/dream-textures
Ucupaint (Textures) *(GPL-3.0 license)* https://github.com/ucupumar/ucupaint	**AutoReload** (v2.0.3)(Blender-Krita Bridge) *(GPL-3.0 license)* https://github.com/samytichadou/Auto_Reload_Blender_addon
Simple Bake (Texture Baking) *(MIT Licence)* https://blendermarket.com/products/simplebake---simple-pbr-and-other-baking-in-blender-2	

Auto-Rig Pro (Royalty-Free) https://blendermarket.com/products/auto-rig-pro	**Faceit** *(MIT Licence)* https://blendermarket.com/products/faceit
ShapeKeyGen v3.29 *(MIT Licence)* https://pymarket.gumroad.com/l/yrfsq	**Any Rig to Rigify** (Retargeting) *(MIT Licence)* **https://dudestudioz.gumroad.com/l/anyrigtorigify**
Face_Landmark_link *(Apache 2.0 License)* https://github.com/Qaanaaq/Face_Landmark_Link	**Livelinkface** (csv-52ARkitshapekey) *(MIT Licence)* https://github.com/nmfisher/blender_livelinkface
FreeMoCap (<v1.5) (Motion Capture) <*(AGPL-3.0 license)*> **Freemocap-addon** https://github.com/freemocap/freemocap https://github.com/freemocap/freemocap_blender_addon	
BlendArMocap (FreeMoCap Rig to "Rigify") *(GPL-3.0 license)* https://github.com/cgtinker/BlendArMocap	
Dynamic Parent v2.0.2(Character-to-Prop Constraint) *(GPL-3.0 license)* https://github.com/romanvolodin/dynamic_parent	

Blend Craft Compositor(Compositor) *(GPL-3.0 license)* https://blendermarket.com/products/blend-craft-compositor-blender-plugin-by-3dt?ref=247

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Software Website (Github)	License
7Zip (*LGPL, BSD 3-clause License)* https://github.com/ip7z/7zip	*mixed*
Audacity https://github.com/audacity/audacity	*GPL-3.0 license*
BeeRef https://github.com/rbreu/beeref	*GPL-3.0 license*
BalanEtcher https://github.com/balena-io/etcher	*Apache-2.0 license*
Blender https://github.com/blender/blender	*GPL-3.0 license*
Musescore https://github.com/musescore/MuseScore	*GPL-3.0 license*
Firefox https://github.com/mozilla/	*MPL-2.0 license*
Comfy UI https://github.com/comfyanonymous/ComfyUI	*GPL-3.0 license*
Docker https://github.com/docker/docker-install	*Apache-2.0 license*
Electrum https://github.com/spesmilo/electrum	*MIT license*
Face_Landmark_link https://github.com/Qaanaaq/Face_Landmark_Link	*Apache-2.0 license*
FFmpeg https://github.com/FFmpeg/FFmpeg	*Mixed*
FreeCAD https://github.com/FreeCAD/FreeCAD	*LGPL license*
FreeMoCap https://github.com/freemocap/freemocap	*AGPL-3.0 license*
fSpy https://github.com/stuffmatic/fSpy-Blender	*GPL-3.0 license*
GIMP https://github.com/GNOME/gimp	*GPL-3.0 license*
Godot https://github.com/godotengine/godot	*MIT license*
Git https://git-scm.com/downloads	*GPL-2.0-license*
HandBrake https://github.com/HandBrake/HandBrake	*GPL-2.0 license*
Inkscape https://github.com/inkscape/inkscape	*GPL-2.0 license*
Kdenlive https://github.com/KDE/kdenlive	*GPL-3.0 license*
Krita https://github.com/KDE/krita	*GPL-3.0 license*
LibreCAD https://github.com/LibreCAD/LibreCAD	*GPL-2.0 license*
LibreOffice https://github.com/libreoffice	*GPL-2.0 license*
LMMS https://github.com/LMMS/lmms	*GPL-2.0 license*
Ollama https://github.com/ollama/ollama	*MIT license*
OBS Studio https://github.com/obsproject/obs-studio	*GPL-2.0 license*
OpenToonz https://github.com/opentoonz/opentoonz	*BSD-3-Clause*
Pinokio https://github.com/pinokiocomputer/pinokio	*MIT license*
Proton VPN https://github.com/ProtonVPN/win-app	*GPL-3.0 license*
PyCharm CE https://github.com/phracek/pycharm-community-edition	*GPL-2.0 license*
Python https://github.com/python/cpython	**mixed*
qBittorrent https://github.com/qbittorrent/qBittorrent	*GPL-2.0 license*
Natron https://github.com/NatronGitHub/Natron	*GPL-2.0 license*
SumatraPDF https://github.com/sumatrapdfreader/sumatrapdf	*GPL-3.0 license*
Element https://github.com/kushview/element	*Apache-2.0 license*
Neural Note https://github.com/DamRsn/NeuralNote	*Apache-2.0 license*
TOR Browser https://github.com/TheTorProject/gettorbrowser	*unknown*
Trelby https://github.com/trelby/trelby	*GPL-2.0 license*
Ultimaker Cura https://github.com/Ultimaker/Cura	*LGPL 3.0 license*
VLC Media Player https://github.com/videolan/vlc	*mixed*
VS Code https://github.com/microsoft/vscode	*MIT license*
Ultimate Vocal Remover V5 https://github.com/Anjok07/ultimatevocalremoverqui	*MIT license*

Free and Open-Source Software (FOSS) For Artists - (Linux)

Firefox (Web Private Browser) [faster] | https://www.mozilla.org/en-US/firefox/new/

TOR Browser (Private Browsing) [slow] | https://www.torproject.org/download/

Proton VPN (Virtual Private Network [VPN]) | https://account.protonvpn.com/downloads

OBS Studio (Broadcasting) | https://obsproject.com/download

qBittorrent (File Sharing) | https://www.qbittorrent.org/download

Python (Python) | https://www.python.org/downloads

VLC Media Player(Media Player/Screen Recorder) | https://www.videolan.ora/vic/

PyCharm (Python IDE Community Edition) | https://www.jetbrains.com/pycharm/download

Electrum (BTC Wallet) | https://electrum.org/#download

Ollama (Run Large Language Model [llm]) | https://ollama.com/

Libre Office (Productivity Office Suite) | https://iwww.libreoffice.org/download/download-libreoffice/

ComfyUI (Image Generation) | https://www.comfy.org/

WineHQ (run Windows app on MacOS/Linux) | https://wiki.winehg.org/Download

Pinokio (one-click install AI Models) | https://pinokio.computer/

Flameshot (Reference Image Capture) | https://flameshot.orgi#download

BeeRef (Image Reference Projection) | https://beeref.org/

Trelby (Screenplay Software) < (run WineHQ) > https://www.trelby.org/download/

SumatraPDF (PDF, EHUB, CRB Reader) | https://www.sumatrapdfreader.org/download

7Zip (File Archiver) | https://www.7-zip.org/download.html

OpenToonz (2D animation software) | https://opentoonz.github.io/e/

Handbrake (Video Transcoder) | https://handbrake.fr/

Ffmpeg (Render [for Krita]) | https://ffmpeg.org/download.html

KRITA (2D Visual Creativity Suite) | https://dev.krita.org/en/download/

Blender (3D Visual Creativity Suite) | https://www.blender.org/download/

LibreCAD (Drafter Architecture) | https://wiki.librecad.ora/index.php/Download

FreeCAD (CAD Engineering) | https://www.freecad.org/downloads.php

Ultimaker Cura (3D Printing) | https:/ultimaker.com/software/ultimaker-cura/

BalenaEtcher (Electronics) | https://etcher.balena.io/

FreeMoCap (Motion Capture Technology) | https://freemocap.org/

Face_Landmark(Motion Capture Technology) | https://github.com/Qaanaaq/Face_Landmark_Link

Natron (2D Compositing)(VFX) | https://natrongithub.github.io/

Musescore (Music Notation) | https://musescore.org/en/download

Godot (Game Design Engine) | https://godotengine.ora/download/windows

Inkscape(Image Graphics [Vector]) | https:/finkscape.org/

Element (Vst2-to-Vts3) | https://github.com/kushview/element

Kdenlive (Video Editor) | https:/kdenlive.org/en/download/

LMMS (Music Design) | https://ilmms.io/download

UltimateVocalRemover(Split) | https://ultimatevocalremover.com

Audacity (Audio Editor) | https://www.audacityteam.org

Neural Note (audio-to-midi) | https://github.com/DamRsn/NeuralNote

Git (Version Control) | https://git-scm.com/downloads/linux

Docker (Software Virtualization) | https://www.docker.com/

VS Code (Code IDE) | https://code.visualstudio.com/download

(PRJ00) Project – Individual Project

Individual Short Film (1min - 3min)
Pre-Production, Production and Post-production, Marketing and Distribution.
Students may also be granted an extension to finish their project during the summer semester.
Individually produce a short film. This Project has five (5) sections.
Project at completion would contain the following.

Section One - Pre-production

1. Treatment (Author, Title, Log-line, Synopsis, Characters)
2. Screenplay (Standard Formatting) (must use screenplay software)
3. Concept Art (characters - three [3])
   - action poses,
   - face expressions,
   - turnarounds,
   - displaying the twelve [12] principles of animation.
4. Concept Art (props)
5. Concept Art (environments)
6. Shot List (scene no., shot no.,shot type, shot descr., camera movement, Location)
7. Storyboard (colour coded characters, direct of movement, camera movement)
8. Animatic (panel/keyframe, camera movement, sound effects and expressive voiceover)
9. Expenditure (human resources, software and budget)

Section Two - Production
Files of the following artificially generated digital assets:

1. Assets - ([Thumbnail] [Cover Art] [Title Card]) (.jpeg)
2. Assets - (Characters and Props) (.usd) (.stl)
3. Assets - (Expressive Voiceover, Subtitles, Sound Effects, Music) (.FLAC)(.srt)
4. Assets - (Motion Capture Data [Input data, output data]) (.csv)
5. Assets - (Scenes of Completed Short Film / Credits Sequence) (1-3 min) (.OpenEXR)
6. Assets - (Shots of Completed Short Film and Credits Sequence)(1-3 min) (.mkv)

Section Three - Post-production

1. Modification of “artificially generated digital assets”.
2. Composition of “artificially generated digital assets” into a complete film.

Selection Four - Marketing

1. Poster (YouTube Thumbnail) (Cover Art) (Title Card)
2. Studio Logo
3. Studio Website (Home, About, Contact [Studio and Workers], Merch [optional])
4. Credits Sequence (video and spreadsheet)
5. Behind-the-scenes Documentary
   a. Teaser at the beginning and title card at end
   b. Footage of some of the work being done.
   c. Processes and visual breakdown of artificially generated digital assets.
   d. Interview of the project manager/director/lecturer.

Section Five - Distribution
YouTube® Channel Creation - Upload in order

1. Teaser - Title Card (Thirty [10] seconds)
2. Teaser - Short Film (Ten-Thirty [10-30] seconds)
3. Character Demo-Reels For each character (Concept Art) (three [3] videos)
4. Behind-the-scenes Documentary (<7 minutes)
5. Completed Short Film (1-3 minutes)

There should be seven (7) videos on the channel or profile at completion.

Donate Bitcoin: **bc1qdjsljjzj4x83v28ks0l3cvwdkqvhyfggzc2w8v**