From: Institute Of Digital Arts Jamaica

ARTIFICIALLY GENERATED ANIMATION FILM PRODUCTION

(Non-Photorealistic Rendering [NPR]) (Physically Based Rendering [PBR]) (Odin Edition)





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

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License

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

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"

: Animation Film Production Programme

Department

: CSEC® (Literature, Visual Arts, Theatre Arts, Music, Technical Drawing) (CAPE® Performing Arts Unit 1 and 2 or satisfactory demo-reel/interview) Prerequisite

Type Of Course

Course Title : "Animation - Artificially Generated Animation Film Production"

Course Code : ANM00 Credits : 3

: Four (4) Year Semester : Two (2)

Duration : 1 Semester, 15 weeks, 60 hrs (3 hrs per week)

Lecture Redistributor : Israel Andrew Brown

Email : israelandrewbrown@proton.me

Website. : https://github.com/israelandrewbrown/AGAFP

Rationale

This course addresses the growing need for digital professionals who can integrate A.I. tools into traditional filmmaking workflows, preparing students for an industry increasingly reliant on Al-enhanced production pipelines while maintaining core storytelling and technical animation skills.

Description

This course leverages State of The Art (SoTA) 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. Understand and utilize 3D animation production techniques to effectively create, modify and compose artificially generated digital assets into a film. Troubleshoot common Al-related issues in

animation film production.

Laptop (≤16gb ram) (≤256gb ssd), e-Mouse, Microphone, ≤50 mbps internet, room, Required Equipment:

: GPU, Graphics Tablet, Graphics Pencil, HDMI-HDMI Cable, Video Capture Card, Optional Equipment 4 WebCam, 4 USB Cable, 3 Three Tripods, 1 Charuco Board, 1 Helmet (relevant)

Edge A.I. () (NVIDIA® GeForce® RTX <8gb) (MacOS [M1][M2][M3][M4])

Objectives

Course Assessment:

Donate Bitcoin

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

2. Understand how artificial intelligence models can address and resolve inefficiencies in 3D animation pipelines, improving overall productivity.

3. Identify, analyze, and resolve common issues arising from the use of artificial intelligence in film production.

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

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

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.

bc1qdjsljjzj4x83v28ks0l3cvwdkqvhyfgqzc2w8v

Week One

What is a film? What is "animation" and "twelve principles of animation"? What is "perspective"? What is the "animation pipeline", labor/skill? What are the occupations on the "animation pipeline"? How to make "paper"/"charcoal" from wood? How to make a "bone flute"? 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 cv / pose detection? What is the "Chain-of-Thought" and "Zero-shot" generation? What is a ControlNet? What is a Lora? What is a computer? What is an operating system? What is hardware and software? What is "free and open source".? What are free and open source software licenses? Why are file formats; [(.txt)(.jpeg)(.stl)(.usd)(.ogg)(.FLAC)(.srt)(.glb)(.csv)(.openEXR)(.mkv)] used? What are references? What is "Glaze" software used for? What is "digital-watermarking"?

What is a "production-meeting"? What is creative "control" and "freedom"? What is "trial-and-error". What is "Edge Artificial Intelligence"? How to set up an "Edge Artificial Intelligence" workstation? How to install relevant "free and open-source" models?

Eg. "pinokio.computer" or "pinokio.co"

(WebUI[Gradio]) (ComfyUI) (ollama)

Week Three

(Lecture) Story Development

(Tutorial) Character / Story Structure (OpenWebUI [deepseek-R1-MoT])

Week Four

(Lecture) Concept Development

(Tutorial) Visual Concept [Characters][Props][Set] (Flux-1-Schnell) (Qwen-Image)

Week Five-to-Six

(Lecture) Audio Development

(Tutorial) Expressive Voice Over (VC/tts/csm) (chatterbox-VC)(zonos-v0.1-tts)(csm)

(Tutorial) Subtitles (Whisper-v3)

(Tutorial) Music Design (Audio-to-Audio) (YuE^{icL})(DiffRhythm^{icL})(ACE-Step^{icL})

(Tutorial) Split Instrumentals/Vocal (Ultimate-Vocal-Remover-V5)
(Tutorial) Audio-to-MIDI (NeuralNote[Spotify-Basic-Pitch])

(Tutorial) Sound Effects (Stable-Audio-Open-1.0) (MMAudio)

Week Seven-Eight

(Lecture) Composition Development (what-ai-cannot-do) (Blender 4.0) (Krita 5.2)

(Tutorial) (Animatics, FX, 2DFX[Fog, Smoke/Fire, Water], VFX Compositing, Video Editing)

Week Nine

(Lecture) Prop Development

(Tutorial) Image-to-3dMesh [Characters][Props][Set] (Hunyuan3D-2.1) (Ultra3D) (TripoSG)

(Tutorial) Image-to-Map-to-3dMesh [Set] (DepthAnything-V2) (Hunyuan-World-1.0)

Week Ten

(Lecture) Look Development

(Tutorial) Image Texture Generation[Characters][Props][Set] (Stable Diffusion-2.1)

Week Eleven-Thirteen

(Lecture) Motion Development

(Lecture) Traditional-Concepts-Through-Computer-Animation

(Tutorial) "Face" - Motion Capture (FaceLandmarkerLink-V0.23)

(Tutorial) "Body" - Motion Capture (FreeMoCap-v1.5)

Week Fourteen:

(Lecture) Motion Development (cont'd)

(Tutorial) "Face/Body" - Pose Detection (t2v i2v v2v) (Wan 2.1-VACE-DWPose-14b)

Week Fifteen:

(Critique) Showcase and review of completed projects.

Course Review : https://github.com/israelandrewbrown/AGAFP
Donate Bitcoin : bc1qdjsljjzj4x83v28ks0l3cvwdkqvhyfggzc2w8v

Resources

israelandrewbrown. "GitHub - Israelandrewbrown/AGAFP:." *GitHub*, 2025, https://github.com/israelandrewbrown/AGAFP

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





Bibliography

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Llama Team. The Llama 3 Herd of Models. 23 July 2024, arXiv, arXiv:2407.21783 [cs.Al].

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Black Forest Labs. FLUX. 2024, https://github.com/black-forest-labs/flux.

Wu, Chenfei, et al. *Qwen-Image Technical Report*. 2025, arXiv, arXiv:2508.02324 [cs.CV]. https://arxiv.org/abs/2508.02324.

Resemble AI. Chatterbox-TTS. 2025. GitHub, https://github.com/resemble-ai/chatterbox.

Kim, Jong Wook, et al. "Robust Speech Recognition via Large-Scale Weak Supervision." *arXiv* preprint arXiv:2212.04356, 6 Dec. 2022, https://arxiv.org/abs/2212.04356.

Yuan, Ruibin, et al. "YuE: Scaling Open Foundation Models for Long-Form Music Generation." *arXiv* preprint arXiv:2503.08638, 11 Mar. 2025, https://arxiv.org/abs/2503.08638.

Ning, Ziqian, et al. "DiffRhythm: Blazingly Fast and Embarrassingly Simple End-to-End Full-Length Song Generation with Latent Diffusion." *arXiv preprint arXiv:2503.01183*, 3 Mar. 2025, https://arxiv.org/abs/2503.01183.

Gong, Junmin, et al. "ACE-Step: A Step Towards Music Generation Foundation Model." *arXiv preprint arXiv:2506.00045*, 28 May 2025, https://arxiv.org/abs/2506.00045.

Takahashi, Naoya, and Yuki Mitsufuji. "Multi-Scale Multi-Band DenseNets for Audio Source Separation." 2017 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics, 15-18 Oct. 2017, New Paltz, NY. arXiv preprint arXiv:1706.09588, 29 June 2017, https://arxiv.org/pdf/1706.09588.

Bittner, Rachel M., et al. "A Lightweight Instrument-Agnostic Model for Polyphonic Note Transcription and Multipitch Estimation." *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2022, Singapore.

Cheng, Ho Kei, et al. "MMAudio: Taming Multimodal Joint Training for High-Quality Video-to-Audio Synthesis." *arXiv preprint arXiv:2412.15322*, 7 Apr. 2025, https://arxiv.org/abs/2412.15322.

Yang, Lihe, et al. "Depth Anything V2." arXiv preprint arXiv:2406.09414, 20 Oct. 2024, https://arxiv.org/abs/2406.09414.

Tencent Hunyuan. "Hunyuan3D 2.1: From Images to High-Fidelity 3D Assets with Production-Ready PBR Material." *arXiv preprint arXiv:2506.15442*, 18 June 2025, https://arxiv.org/pdf/2506.15442.

Li, Yangguang, et al. "TripoSG: High-Fidelity 3D Shape Synthesis using Large-Scale Rectified Flow Models." *arXiv preprint arXiv:2502.06608*, 2025.

Chen, Yiwen, et al. "Ultra3D: Efficient and High-Fidelity 3D Generation with Part Attention." *arXiv* preprint arXiv:2507.17745, 23 July 2025, https://arxiv.org/abs/2507.17745.

Mattis, Johnathon, et al. "freemocap." Version 1.0.0, 30 Sept. 2024, https://github.com/freemocap/freemocap. DOI: 10.5281/zenodo.7233713.

Artificially Generated Animation Film Production

israelandrewbrown. "GitHub - Israelandrewbrown/AGAFP." *GitHub*, 2025, https://github.com/israelandrewbrown/AGAFP.

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

Demonstration Spaces (Software As A Service [SaaS])			
Model Name	Links		
Deepseek-R1-MoT	https://chat.deepseek.com/		
gpt-oss	International Control of the Control		
Llama-3.2	https://www.meta.ai/		
Stable-Diffusion-2.1 krita-ai-diffusion	https://huggingface.co/spaces/stabilityai/stable-diffusion https://github.com/Acly/krita-ai-diffusion		
Flux-1-Schnell	https://huggingface.co/spaces/black-forest-labs/FLUX.1-schnell		
Qwen-Image	https://huggingface.co/spaces/Qwen/Qwen-Image *runs-on-high-grade-hardware (<24gb vram)		
chatterbox-VC	https://huggingface.co/spaces/ResembleAl/Chatterbox		
zonos-v0.1-tts	https://huggingface.co/spaces/Steveeeeeeen/Zonos		
sesame-csm NariLabs-dia-csm	https://www.sesame.com/research/crossing_the_uncanny_valley_of_voice https://huggingface.co/spaces/nari-labs/Dia-1.6B		
Whisper-v3	https://huggingface.co/spaces/openai/whisper		
YuE ^{ICL}	https://huggingface.co/spaces/innova-ai/YuE-music-generator-demo		
DiffRhythm ^{ICL}	https://huggingface.co/spaces/ASLP-lab/DiffRhythm		
ACE-Step ^{ICL}	https://huggingface.co/spaces/ACE-Step/ACE-Step		
Ultimate-Vocal-Remover-v5	https://github.com/Anjok07/ultimatevocalremovergui		
NeuralNote [Spotify-Basic-Pitch]	https://basicpitch.spotify.com/		
Stable-Audio-Open-v1.0			
MMAudio	https://huggingface.co/spaces/hkchengrex/MMAudio		
DepthAnything-v2	https://huggingface.co/spaces/depth-anything/Depth-Anything-V2		
Hunyuan3D-2.1	https://huggingface.co/spaces/tencent/Hunyuan3D-2.1		
TripoSG [cpu]	https://huggingface.co/spaces/VAST-AI/TripoSG		
Ultra3D	https://huggingface.co/spaces/ilcve21/Sparc3D		
FreeMoCap Face_Landmark_Link	https://github.com/freemocap/freemocap https://github.com/Qaanaaq/Face Landmark Link		
Wan2.1-VACE (T2V I2V V2V)	*runs-on-high-grade-hardware (<24gb vram)		

Artificially Generated Animation Film Production

israelandrewbrown. "GitHub - Israelandrewbrown/AGAFP." GitHub, 2025, https://github.com/israelandrewbrown/AGAFP

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

Generative Artificial Intelligence Models (Software User Documentation)			
Model Name	License	Official Github Repository	
Deepseek-R1-MoT	MIT-License	https://github.com/deepseek-ai/DeepSeek-R1	
gpt-oss	Apache-2.0-License	https://github.com/openai/gpt-oss	
Llama-3.2	META-Community-License	https://github.com/meta-llama/llama3	
Stable-Diffusion-2.1	MIT-License	https://github.com/Stability-Al/stablediffusion	
Flux-1-Schnell	Apache-2.0-License	https://github.com/black-forest-labs/flux	
Qwen-Image	Apache-2.0-License	https://github.com/QwenLM/Qwen-Image	
chatterbox-VC	MIT-License	https://github.com/resemble-ai/chatterbox	
zonos-v0.1-tts	Apache-2.0-License	https://github.com/Zyphra/Zonos	
sesame-csm NariLabs-dia-csm	Apache-2.0-License	https://github.com/SesameAlLabs/csm https://github.com/nari-labs/dia	
Whisper-v3	MIT-License	https://github.com/openai/whisper	
YuE ^{ICL}	Apache-2.0-License	https://github.com/multimodal-art-projection/YuE	
DiffRhythm ^{ICL}	Apache-2.0-License	https://github.com/ASLP-lab/DiffRhythm	
ACE-Step ^{ICL}	Apache-2.0-License	https://github.com/ace-step/ACE-Step	
UVR-v5	MIT-License	https://github.com/Anjok07/ultimatevocalremovergui	
Spotify-Basic-Pitch	Apache-2.0-License	https://github.com/spotify/basic-pitch	
Stable-Audio-Open-1.0	Stability-Al-Community-License	https://github.com/Stability-Al/stable-audio-tools	
MMAudio	MIT-License	https://github.com/hkchengrex/MMAudio	
DepthAnything-v2	Apache-2.0-License	https://github.com/DepthAnything/Depth-Anything-V2	
Hunyuan-World-1.0 [gpu-required]	Tencent-Community-License	https://github.com/Tencent-Hunyuan/HunyuanWorld-1.	
Hunyuan3D-2.1 [gpu-required]	Tencent-Community-License	https://github.com/Tencent-Hunyuan/Hunyuan3D-2.1	
TripoSG [cpu]	MIT-License	https://github.com/VAST-AI-Research/TripoSG	
Ultra3D	7	https://github.com/lizhihao6/Sparc3D	
Mediapipe OpenCV	Apache-2.0-License	https://github.com/google-ai-edge/mediapipe https://github.com/opencv/opencv	
Wan2.1-VACE-DWPose-14b	Apache-2.0-License	https://github.com/ali-vilab/VACE	

Face_Landmark_link (Apache-2.0-License) https://github.com/Qaanaaq/Face_Landmark_Link

BlendArMocap (FreeMoCapRig to "Rigify") (GPL-3.0) https://github.com/cgtinker/BlendArMocap

Useful Links (Compatible with "Blender 4.0" "Krita 5.2.3")

StoryLiner (Animatics) (GPL-3.0-License) https://superhivemarket.com/products/storyliner (Export-Import[.blend]) (GPL-3.0-License) https://github.com/israelandrewbrown/ExportImport-Selection		
AutoCam (GPL-3.0-License) https://renderrides.gumroad.com/l/autocam (GPL-3.0-License) https://github.com/ra100/camera_shakify		
Sculpt Layers https://superhivemarket.com/products/sculpt	(CC-BY-4.0) t-layers	Boot Tool (GPL-2.0-License) [natively-built-into-Blender]
QRemeshify (Quad-Remesher) (GI https://github.com/ksami/QRemeshify/releas	PL-3.0-License) ses/tag/1.1.0	PolyQuilt (Retopology) (GPL-3.0-License) https://github.com/AIGODLIKE/PolyQuilt
OkTopo-Remesher (Retopology) (GPL-3.0-License) AutoUV (UV Unwrapper) (cuhttps://yegorkumachov.gumroad.com/l/oktopo		
Ucupaint (Textures) (GPL-3.0-License) https://github.com/ucupumar/ucupaint	AutoReload https://github.co	(v2.0.3) (Blender-Krita B <mark>ridge) (<i>GPL</i>-3.0-License)</mark> m/samytichadou/Auto_Reload_Blender_addon
Quick Edit (Blender-Krita_Bridge) [natively-built-into-Blender]	Oven Bake https://superhive	(Texture Bake) (GPL-3.0-License) emarket.com/products/ovenbake
fSpy (https://fspy.io/) (GPL-3.0-License) https://github.com/stuffmatic/fSpy-Blender	DeepBump https://github.c	(Image-to-NormalMap) (GPL-3.0-License) om/HugoTini/DeepBump
Zform (Map-to-Mesh) (<i>GPL-3.0-License</i>) https://superhivemarket.com/products/zform	Depth Map Ba	utch (Image-to-DepthMap) (GPL-3.0-License) emarket.com/products/depth-map-batch-for-images
Stable Projectorz (custom-license) https://stableprojectorz.com/	Dream Texture https://github.c	es [NVIDIA-only] [MacOS] (GPL-3.0-License) om/carson-katri/dream-textures
AutoRigPro / ARP-to-Rigify (R-F) (GPL https://superhivemarket.com/products/auto-r	-3.0-License) rig-pro	TransportRig (GPL-3.0-License) https://blenderigmaster.gumroad.com/l/vrf_plus
Skinning https://superhivemarket.com/products/voxel-heat-	3.0-License) -diffuse-skinning	RiggingTools (GPL-3.0_License) https://joshdoyle.gumroad.com/l/jd_rigging_tools
FreeMoCap v1.5 (AGPL-3.0 https://github.com/freemocap/freemocap		ceit (GPL-3.0-License) os://superhivemarket.com/products/faceit

RealMotionPro (Animation-Library) (GPL-3.0-License) https://superhivemarket.com/products/realmotion-pro-blender-addon-for-animation

X-PosePicker/GPLPicker (R-F) (GPL-3.0-License) https://superhivemarket.com/products/x-pose-pickerhttps://munorr.gumroad.com/l/ft-anim-picker-blender	BoneSelector (GPL-3.0-License) https://phihung250693.gumroad.com/l/iyutsk	
AnimationLayers (GPL-3.0-License) https://superhivemarket.com/products/animation-layers	F-Curve Wizard (GPL-3.0-License) https://superhivemarket.com/products/f-curve-wizrd	
RigUI (GPL-3.0-License) https://superhivemarket.com/products/rig-ui	Dynamic Parent (v2.0.2) (GPL-3.0-License) https://github.com/romanvolodin/dynamic_parent	
ReTime (GPL-3.0-License) https://superhivemarket.com/products/retime	DJV (frameNumber-video) (BSD-3-Clause-Licence) https://github.com/darbyjohnston/DJV	
Onion Skin Tools (GPL-3.0-License) https://superhivemarket.com/products/onion-skin-tools	Playblast (preview animation) (GPL-3.0-License) https://github.com/RxLaboratory/DuBlast	

Blend Craft Compositor / VFX BreakdownMaker (GPL-3.0-License) https://superhivemarket.com/products/blend-craft-compositor-blender-plugin-by-3dt https://superhivemarket.com/products/breakdown-maker

Useful Links (Compatible with "Blender 4.0" for VFX) https://drive.proton.me/urls/G56G4M5C9R#RxYnZ4MHGMXX		
Freezing Effect Generator (Frost) (GPL-3.0-License) https://maroc777772.gumroad.com/l/Freezing-Effect-Generator		
Alt Tab Easy Fog https://superhivemarket	(Fog) .com/products/alt-tab-easy-fog	(GPL-3.0-License)
Water Shader https://chuckcg.gumroa	(Water) d.com/l/sxbcnw	(GPL-3.0-License)
Dynamic Rain https://cgcool.gumroad.	(Rain) com/l/lxmii	(GPL-3.0-License)
Particle-X https://superhivemarket	(Particles) .com/products/particles-x	(G <mark>PL-3.0-License)</mark>
Electro https://maroc777772.gu	(Lighting) mroad.com/l/yupnu	(GPL-3.0-License)
Dust Particles https://superhivemarket	(Dust) .com/products/dust-particles	(Royalty-Free)
Smoke Scatter https://cgcool.gumroad.	(Smoke) com/l/ybsfu	(GPL-3.0-License)
Fire Scatter https://cgcool.gumroad.	(Fire) com/l/xrwyo	(GPL-3.0-License)

Lazy Forest Generator () https://superhivemarket.com/products/lazy-forest-generator	(Royalty-Free) ator-addon
Stylized Animated Grass () https://superhivemarket.com/products/grasspaint-stylized-animate	(Royalty-Free) ed-grass-assets-library
Stylized Trees/Plants Library () https://superhivemarket.com/products/flora-paint-stylized-t	(Royalty-Free) ree-and-plants-library
Stylized Tree Asset Generator () https://superhivemarket.com/products/stylized-tree-generator	(Royalty-Free) erator
Open Scatter (Object Scatter) https://superhivemarket.com/products/openscatter	(GPL-3.0-License)

Software Website (Github)	License
7Zip (File Archiver) https://github.com/ip7z/7zip	(LGPL, BSD 3-clause
Audacity (Audio Editor) https://github.com/audacity/audacity	GPL-3.0 license
Balena Etcher (Electronics) https://github.com/balena-io/etcher	Apache-2.0 license
BeeRef (Image Reference Projection) https://github.com/rbreu/beeref	GPL-3.0 license
Bitcoin-Core (Wallet/Node) https://bitcoin.org/en/bitcoin-core/	MIT license
Blender (3D Visual Creativity Suite) https://github.com/blender/blender	GPL-3.0 license
Comfy UI (Image Generation) https://github.com/comfyanonymous/ComfyUI	GPL-3.0 license
Docker (Software Virtualization) https://github.com/docker/docker-install	Apache-2.0 license
DJV (FrameNumber) https://github.com/darbyjohnston/DJV	BSD-3 Clause Licence
Electrum (BTC Wallet) https://github.com/spesmilo/electrum	MIT license
Element (Vst2-to-Vst3) https://qithub.com/kushview/element	Apache-2.0 license
Face_Landmark_link (Motion Capture) https://github.com/Qaanaaq/Face_Landmark_Link	Apache-2.0 license
FFmpeg (Render [for Krita]) https://github.com/FFmpeg/FFmpeg	Mixed
Flameshot (Reference Image Capture) https://github.com/flameshot-org/flameshot	GPL-3.0 license
FreeCAD (CAD Engineering) https://github.com/FreeCAD/FreeCAD	LGPL license
FreeMoCap (Motion Capture) https://github.com/freemocap/freemocap	AGPL-3.0 license
Firefox (Web Private Browser) [faster] https://github.com/mozilla/	MPL-2.0 license
fSpy (Image Projection) https://github.com/stuffmatic/fSpy-Blender	GPL-3.0 license
GIMP (Image Manipulation) https://github.com/GNOME/gimp	GPL-3.0 license
Godot (Game Design Engine) https://github.com/godotengine/godot	MIT license
Git (Version Control) https://git-scm.com/downloads	GPL-2.0- license
HandBrake (Video Transcoder) https://github.com/HandBrake/HandBrake	GPL-2.0 license
Inkscape (Image Graphics [Vector]) https://github.com/inkscape/inkscape	GPL-2.0 license
Kinovea (SyncVideo) https://github.com/Kinovea/Kinovea	GPL-2.0 license

Krita (2D Visual Creativity Suite) https://github.com/KDE/krita	GPL-3.0 license
LibreCAD (Drafter Architecture) https://github.com/LibreCAD/LibreCAD	GPL-2.0 license
LibreOffice (Productivity Office Suite) https://github.com/libreoffice	GPL-2.0 license
LMMS (Music Design) https://github.com/LMMS/lmms	GPL-2.0 license
Ollama (Run [llm]) https://github.com/ollama/ollama	MIT license
OBS Studio (Broadcasting) https://github.com/obsproject/obs-studio	GPL-2.0 license
OpenToonz (2D animation software) https://opentoonz.github.io/e/	BSD-3 Clause
Pinokio (one-click install Al Models) https://github.com/pinokiocomputer/pinokio	MIT license
Proton VPN (Virtual Private Network) https://github.com/ProtonVPN/win-app	GPL-3.0 license
PyCharm CE (Python IDE) https://github.com/phracek/pycharm-community-edition	GPL-2.0 license
Python (Python) https://github.com/python/cpython	*mixed
qBittorrent (File Sharing) https://github.com/qbittorrent/qBittorrent	GPL-2.0 license
QEMU (Emulator) https://github.com/qemu/qemu	GPL-2.0 license
Fstl (File Data Viewer) https://github.com/fstl-app/fstl	MIT license
SumatraPDF (PDF, EPUB,CRB Reader) https://github.com/sumatrapdfreader/sumatrapdf	GPL-3.0 license
Musescore (Music Notation) https://github.com/musescore/MuseScore	GPL-3.0 license
Natron (2D Compositing)(VFX) https://github.com/NatronGitHub/Natron	GPL-2.0 license
Neural Note (audio-to-midi) https://github.com/DamRsn/NeuralNote	Apache-2.0 license
TOR Browser (Private Browsing) [slow] https://github.com/TheTorProject/gettorbrowser	unknown
Trelby (Screenplay Software) https://github.com/trelby/trelby	GPL-2.0 license
Ultimaker Cura (3D Printing) https://github.com/Ultimaker/Cura	LGPL 3.0 license
Ultimate Vocal Remover V5 (Split) https://github.com/Anjok07/ultimatevocalremovergui	MIT license
VLC Media Player (Media Player) https://github.com/videolan/vlc	mixed
VS Code (Code IDE) https://github.com/microsoft/vscode	MIT license
WineHQ (Productivity Office Suite) https://wiki.winehg.org/Download	LGPL

"The Ten Essential Roles On The New Pipeline"

Producer

A producer guides a film from its beginning to its completion. They have a hand in organizing and scheduling, budgeting and hiring, creative problem-solving and overseeing, and marketing and distributing. A producer may be a self-employed contractor, or subject to the authority of an employer such as a production company or studio. They are involved throughout all phases of production from inception to completion.

<citation>

Director

This person 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.

Technical Artist

This person (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.

<citation>

Artificial Intelligence Operator [Story] [Concept] [Audio] [Prop] [Look] [Movement]

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

<citation>

Layout-Artist / Animatic-Artist

This person 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.

<citation>

VFX Compositing Artist

This 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 lines. <citation>.

Video Editor

This person 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.

<citation>.

Graphic Designer

Graphic designers create visual concepts, using computer software or by hand, to communicate ideas that inspire, inform, and captivate consumers.

<citation>

Attorney-At-Law [Lawyer]

A lawyer (also called attorney, counsel, or counselor) is a licensed professional who advises and represents others in legal matters. Today's lawyer can be young or old, male or female. Nearly one-third of all lawyers are under thirty-five years old. Almost half of the law students today are women, and women may ultimately be as numerous in the profession as men.

<citation>

Accountant

An accountant is a financial professional who reviews and analyses financial records and keeps track of a company's or individual's income, expenditures, and liabilities. An accountant may also work in project planning, cost analysis, auditing, and financial decision-making. Some specialize in tax preparation and tax planning. Accountants may work for large companies or external accounting firms. They must meet state-specific educational and testing requirements and are certified by national professional associations.

(PRJ00) Project - Individual Project

Individual Short Film (1minutes - 15minutes)

Pre-Production, Production and Post-production, Marketing and Distribution.

Students may also be granted an extension to finish their project during the summer semester. By Group or Individually produce a short film. This Project has five (5) sections.

The Project at completion would contain the following.

Section One - Pre-production

- Research Paper
- 2.
- Treatment (Author, Title, Log-line, Synopsis, Characters)
 Screenplay (three-act-structure) (Standard Formatting) (must use screenplay software)
 Concept Art (characters three [≤3])
- - action poses,
 - face expressions,
 - turnarounds,
 - displaying the twelve [12] principles of animation.

Concept Art (props)
Concept Art (environments)

- Shot List (scene no., shot no., shot type, shot descr., camera movement, Location)
- Storyboard (colour coded characters, direct of movement, camera movement)
- Story-Beats
- Animatic (panel/keyframe, camera movement, sound effects and expressive voiceover)
- Expenditure (Gantt-Chart, Human resources, Software/Equipment and Budget)
- 10. Pitch (Presentation for "Summary Of Pre-production")

[Greenlight Statement (Proof-Of-Funding)]

Section Two - Production

Files of the following artificially generated digital assets:

1.	Assets - ((Text-Concept)	(.txt)(.fountain)
2.	Assets - (Visual-Concept)	(.jpég)
3.	Assets - (Expressive Voiceover, Subtitles, Sound Effects, Music)	(.FLAC)(.srt)
4.	Assets - (Character-Prop-Environment)	(.usd)(.stl)(.glb)
5.	Assets - (PBRTextures [CharacterProp-Environment])	(.usd)(.stl)(.glb)
		Motion Capture Data [Input data, output data])	(.csv)
7.	Assets - (Shots of Short Film and Credits Sequence)(≤1 min)	(.exr) (.mkv)

Section Three - Post-production

- Modification of "artificially generated digital assets".

 Composition of "artificially generated digital assets" into a complete film.

 Utilization of FX, 2DFX, VFX, to enhance film composition.
- Arrangement of film through video editing and color grading.
- Presentation of film

Selection Four - Marketing

- Brand Identity
- Poster
- (YouTube Thumbnail) (Cover Art) (Title Card) (Home, About, Contact [Studio and Workers], Blog, Merch [optional]) 3. Studio Website
- Credits Sequence (video and spreadsheet)
- 5. Grant, Direct-Promotion, Indirect-Promotion, Rebate, Tax-Credit.

Section Five - Distribution

[Optional Distribution through Film Festival] YouTube® Channel Creation - Upload in order

(Thirty [10] seconds) (Ten-Thirty [10-30] seconds) Teaser - Title Card Teaser 2. (one [1] minute - three [3] minutes) Trailer

Behind-the-scenes Documentary (<7 minutes)

- Teaser at the beginning and title card at end Footage of some of the work being done.
- Processes and visual breakdown of artificially generated digital assets.
- Interview of the project manager/director/lecturer.
- Completed Short Film (1-15 minutes)

There should be five (5) videos on the channel or profile at complétion.

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