RYAN RUIZ

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DEMO REEL BREAKDOWN

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Project Name: Strange World

Project Type: Feature Animation

Studio: Walt Disney Animation Studios

Task/Problem: Art Direct character cloth and hair with a subtle environmental breeze matching the directors vision. Extreme poses from animation would often break the characters cloth and cause IPs of mutliple layers of cloth (shirt, pants, straps, pockets) to intersect and break the simulation. Flamethrower prop asset was not setup for simulation requiring a new sim rig and shape sculpting for static poses.

Solution: Seperate caches for multiple layers of cloth and hair for better sim results. Paint weights for cloth parameters including damp for areas not requiring secondary motion. Communicate with animation team for better character poses to not cause colliders to break cloth sims. Created a wind field with noise to apply on all characters for the breeze in front of the air ship. Character style guides were established to make sure CFX maintains the look and feel for each character. Character Post Sim finalling for individual hair or cloth cleanup.

Project Name: Ruby Gillman, The Teenage Kraken

Project Type: Feature Animation

Studio: Dreamworks Animation

Task/Problem: Art Direct tentacle hair and cloth garments for extreme motion, exageratted poses, and in or out of water sequences. Sea kelp in the water should react to Ruby as she swims.

Solution: Develop multiple sim rigs with different settings for in or out of water. For swimming scenes or fast motion animation a procedural wind can be added to tentacles to avoid a long wait time for caching. For sequences where the director approved the tentacle motion from animation a weighted blend shape was used to add a organic mix of simulated and animated tentacles. Multiple sim caches with blends in between where utilized for shots in which Ruby would transition from one extreme motion to another in combination with motion multiplier adjustments.

Project Name: Puss in Boots: The Last Wish - ASMR

Project Type: Feature Animation TV Spot

Studio: Dreamworks Animation

Task/Problem: Address character fx for animation ranging from subtle close up static shots to high action jumps to ceiling. Create a sim setup for brush prop when cleaning boots and interaction with table. Rig and animation microphone stand prop.

Solution: Seperate and refine simulation properties for cape, belt, hat, feathers, skin, and fur. Utilize 2D drawovers to 'fake' hair falling out in a comic style instead of in 3D. Keyframe a non-dynamic deformer on brush prop rig to react as if simulated. Re-Pose/animate position for hat and hat feathers for a more aethestically pleasing position prior to simulation. Create a seperate sim rig for cape when hanging from ceiling because default rig was designed to be stiff and tight on back.

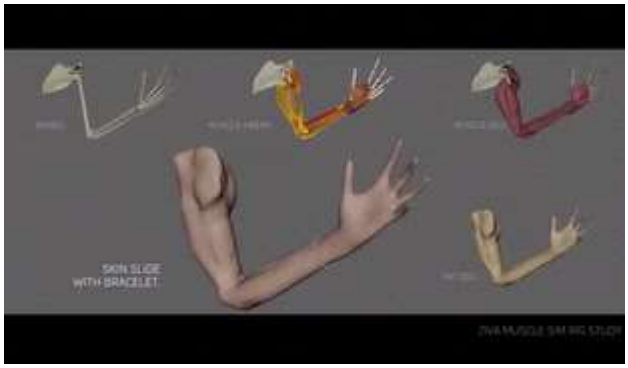
Project Name: ABBA Voyage

Project Type: Digi Double / Holographic Concert at Pudding Mill Lane Station

Studio: Industrial Light and Magic

Task/Problem: Create highly realistic Digi Doubles of ABBA with multiple outfits singing multiple songs for extremely long frame ranges to be shown year round at ABBA Arena in Pudding Mill Lane.

Solution: Utilize face scans and MoCap data of actual ABBA group in combination with MoCap data of professional dancers for base layer. Simulate muscles and refine sculpts to emphasis muscle groups specifically the neck for realism. Tailor garments to fit characters correctly and to improve sim results. Adjust cloth sim rig settings to art direct a cat walk animation to match cg sup/directors vision. Apply sim rig to multiple sequences and utilize procedural post simulation finalling for any extra cleanup.

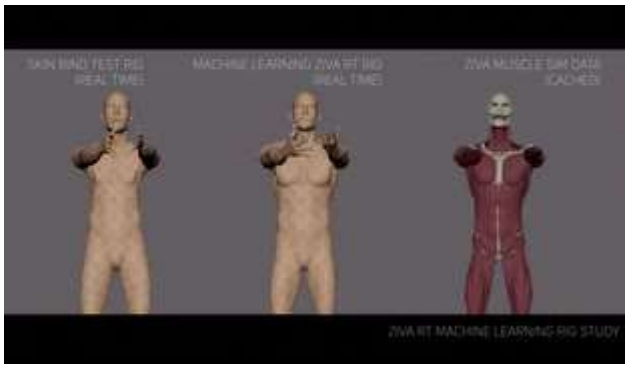


Project Name: Ziva VFX Muscle Sim Rig

Project Type: Personal Study

Task/Problem: Instead of sculpting muscle shapes on a skin geo, develop an anatomy correct muscle sim rig.

Solution: Using a model with properly shaped and spaced muscles attached to anatomically correct bone skeleton structure, muscle fibers can be activated manually or based on movement using line of action curves and excitement parameter of muscle fiber using Ziva VFX.



Project Name: Ziva VFX Machine Learning

Project Type: Personal Study

Task/Problem: Develop a real time Muscle Simulation rig without requiring a long sim time and caching data on disc.

Solution: Use Machine Learning to import Muscle Sim cached data into ZivaRT to train a real-time rig in Maya to have same results as the cached muscle sim.

Project Name: Marvelous Designer Tailoring

Project Type: Personal Study

Task/Problem: Tailor garments utilizing pattern making techniques

Solution: Tailor puffer jacket, sweatpants, and beanie with simulation in Marvelous Designer Rendered using Houdini Mantra.

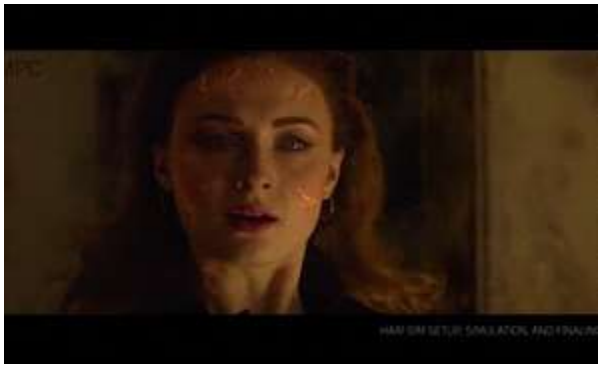
Project Name: The Nutcracker and the Four Realms

Project Type: Feature Film VFX

Studio: MPC

Task/Problem: Create highly realistic digi doubles for polichinelle characters interacting with a live action plate. Withstand a wide range of motion.

Solution: Create sim rigs with realistic cloth parameters. Simulate and blendshape non-dynamic deformers to withstand rolling motion. Keyframe deformers on garment accessories for example bells on shoulders for secondary motion.



Project Name: XMen Dark Phoenix

Project Type: Feature Film VFX

Studio: MPC

Task/Problem: Art Direct hair behavior of Jean Grey to have a balance of magical and realistic motion matching CG sup and director's vision.

Solution: Develop a hair sim rig to withstand extreme motion and have the ability to adjust motion per shot/sequence. Inverting gravity and an additional air field with noise was added to allow the hair to float mid shot. Animated bullet colliders and clustered hair constraints were keyed on/off when the character was being shot at. Multiple wedge testing to find the best wrap mode to attach the rendered hair to the simulated curves producing a realistic look.

Project Name: His Dark Materials Season 1

Project Type: TV Series - VFX

Studio: Framestore

Task/Problem: Create highly realistic CG creatures including a Polar Bear with armor named Iorek

Solution: Simulate muscle, fat, skinslide, face sim, fur, and armor cloth using seperate caches for various creatures. For close up shots, paint areas of the face sim to allow more jiggle on cheeks/throat. Save time on simulation by utilizing non-dynamic deformers on paws to fake collisions.

Project Name: Lady and the Tramp

Project Type: Feature Film VFX

Studio: Framestore

Task/Problem: Create highly realistic CG dogs which convey emotion and do not fall under uncanny valley.

Solution: Simulate muscle, fat, skinslide, fur, and dog collars on seperate caches. Utilize non-dynamic deformers where possible to save on simulation time. Key muscle parameters to excite muscle fibers to match animation performance per shot when needed.