

A.I. & ANIMATION

THE ANIMATION INDUSTRY HAS WITNESSED A REMARKABLE TRANSFORMATION OVER THE RECENT YEARS, THANKS TO THE INTEGRATION OF ARTIFICIAL INTELLIGENCE (AI) INTO ITS CREATIVE PROCESSES. AI, WITH ITS CAPACITY FOR AUTOMATION, DATA ANALYSIS, AND PATTERN RECOGNITION, HAS ONLY EXPEDITED THE PRODUCTION PROCESS. AI-POWERED TOOLS CAN GENERATE REALISTIC FACIAL EXPRESSIONS AND BODY MOVEMENTS FOR ANIMATED CHARACTERS. THESE TOOLS ANALYZE MOTION CAPTURE DATA AND EFFORTLESSLY TRANSLATE IT INTO LIFELIKE ANIMATIONS, A PROCESS THAT GREATLY REDUCES PRODUCTION TIME AND EFFORT. THE TEAM OF CORRIDOR CREW HAS DEMONSTRATED THIS QUITE OSTENSIBLY THROUGH THEIR EFFORTS IN THE VIDEO: "ANIME ROCK, PAPER, SCISSORS" WHICH TOOK THE INTERNET BY STORM WITH 4 MILLION VIEWS AND BOTH FASCINATION WITH THE POTENTIAL OF AI-SUPPORTED ANIMATION AND AN OUTCRY AGAINST IT.(REF. 1)



AI STREAMLINES THE LABORIOUS TASK OF LIP SYNC IN ANIMATION. IT CAN AUTOMATICALLY SYNCHRONIZE CHARACTER LIP MOVEMENTS WITH DIALOGUE, ENSURING A PRECISE MATCH BETWEEN SPEECH AND ANIMATION, THEREBY IMPROVING EFFICIENCY AND ACCURACY. ONE OF THE EARLIER USES OF THE AI DURING OUR CURRENT REVOLUTION IN THE TECHNOLOGY WAS THE SYNCING OF STILL IMAGES AND VIDEO TO OTHER AUDIO WHILST CHANGING ONLY THE LIPS TO MATCH THE WORDS.(REF. 2)



AI'S ABILITY TO GENERATE DETAILED AND REALISTIC BACKGROUNDS AND ENVIRONMENTS BASED ON ARTISTIC DIRECTION HAS REVOLUTIONIZED THE INDUSTRY. BACKGROUND ARTISTS BENEFIT FROM THESE AI-GENERATED RESOURCES, LEADING TO A FASTER PRODUCTION PROCESS. (REF. 3)

AI CAN EMPOWER INDEPENDENT CREATORS AND SMALL STUDIOS TO PRODUCE HIGH-QUALITY ANIMATED CONTENT MORE AFFORDABLY. THIS CAN LEAD TO A BROADER RANGE OF VOICES AND STORIES BEING REPRESENTED IN THE ANIMATION INDUSTRY. HOWEVER, THE COPYRIGHT SITUATION OF AI MAKES IT SO THAT AS LONG AS THE USER TRAINS THE AI ON A DATABASE OF WORK WHICH THEY ALREADY OWN, THEN THEY ALSO OWN THE PRODUCTS OF THE AI. THIS GIVES AN ADVANTAGE FOR LARGER CORPORATIONS WITH AN EXISTING DATABASE TO PUT INTO A TRAINING SET. AI-GENERATED CONTENT BLURS THE LINES OF OWNERSHIP AND COPYRIGHT. DETERMINING WHO OWNS THE RIGHTS TO AI-GENERATED CHARACTERS, ANIMATIONS, AND DESIGNS CAN BE CHALLENGING. STUDIOS AND CREATORS MUST ESTABLISH CLEAR GUIDELINES AND LEGAL FRAMEWORKS FOR OWNERSHIP AND INTELLECTUAL PROPERTY IN AI-GENERATED CONTENT. (REF. 4)

ONE OF THE PRIMARY ETHICAL CONCERNS IS THE POTENTIAL FOR JOB DISPLACEMENT WITHIN THE ANIMATION INDUSTRY. AS AI AUTOMATES VARIOUS ASPECTS OF ANIMATION PRODUCTION, THERE IS A RISK THAT TRADITIONAL ANIMATORS AND ARTISTS, ESPECIALLY AT THE ENTRY-LEVEL, MAY BE REDUCED OR ELIMINATED. STUDIOS MUST CONSIDER THE IMPACT ON THEIR WORKFORCE AND TAKE STEPS TO RESKILL OR RETRAIN EMPLOYEES WHOSE ROLES MAY BE AFFECTED. HOWEVER, IT CAN ALSO LEAD TO THE CREATION OF NEW JOB OPPORTUNITIES IN AI DEVELOPMENT, DATA ANNOTATION, AND CONTENT CURATION. (REF. 5)

AI ALGORITHMS USED FOR CHARACTER DESIGN AND ANIMATION MAY INADVERTENTLY PERPETUATE BIASES IN TERMS OF GENDER, RACE, AND OTHER CHARACTERISTICS. IF THE TRAINING DATA USED TO DEVELOP AI MODELS IS BIASED, THE RESULTING ANIMATIONS MAY REFLECT AND REINFORCE THESE BIASES. IT IS CRUCIAL THAT AI ARE TRAINED ON DIVERSE AND REPRESENTATIVE DATASETS AND THAT CONTENT CREATORS ACTIVELY ADDRESS BIAS IN THEIR WORK. (REF. 6)

SOCIETY MAY NEED TO IMPROVE ITS MEDIA LITERACY SKILLS TO DISTINGUISH BETWEEN AI-GENERATED AND HUMAN-CREATED CONTENT. THIS IS ESPECIALLY IMPORTANT AS DEEPFAKE TECHNOLOGY ADVANCES. AS OF OCTOBER IN 2023, THERE HAVE BEEN MANY EXAMPLES OF AI BEING USED TO SPREAD MISINFORMATION WITHIN THE POLITICAL SPHERE AS DEEPFAKES OF POLITICIANS ARE BECOMING A MORE COMMON DEFAMATION TECHNIQUE. IN SLOVAKIA, A SLEW OF AI-GENERATED VIDEOS WERE SPREAD ACROSS SOCIAL MEDIA, CREATING DISINFORMATION AROUND SLOVAKIAN POLITICIANS. (REF. 7)

REFERENCES

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