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Application of OpenPose-Based Skeletal Binding in Generative AI: Technical Issues And Regulatory Concerns

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Abstract

In recent years, generative artificial intelligence (AI) has rapidly developed and shown a growing trend of integration with other technologies, particularly those related to human pose recognition. For example, by incorporating OpenPose skeletal diagrams into the ControlNet architecture for models such as Stable Diffusion, it is possible to precisely adjust character postures in generated images. This study introduces the foundations of generative AI and applies methods such as literature analysis, case studies, and semi-structured expert interviews. Experts pointed out that generative AI raises issues of copyright ownership and personal privacy. The training data often comes from online resources, creating disputes over the rights of original authors. Meanwhile, skeletal data represents sensitive biometric information, and its leakage can lead to privacy and security risks. Therefore, this paper proposes comprehensive strategies including technical optimization, regulatory prudence, and industry oversight to guide the standardized development of this field.

Keywords:*OpenPose,Skeletal Binding,Pose Control,Regulatory Risks*

1. Introduction

In recent years, generative artificial intelligence (AI) and generative models have been increasingly integrated within the visual domain. Since Goodfellow proposed Generative Adversarial Networks (GANs), generative techniques have rapidly evolved, giving rise to approaches such as Variational Autoencoders (VAEs) and diffusion-based generative methods[1]. More recently, image-generation tools such as Stable Diffusion and DALL·E have undergone continuous optimization, enabling ordinary users to produce high-quality images through simple textual descriptions.While these models are highly efficient, concerns have been raised regarding the copyright ownership and quality of generated outputs, primarily due to the origins of training data and the ″black-box″ nature of the models. Furthermore, with the rise of multimodal technologies such as Transformers and pre-training, the challenges faced by generative AI have become increasingly prominent.

2. Background and Motivation

2.1. Research Background

Currently, generative artificial intelligence (exemplified by Stable Diffusion) is primarily focused on image generation. Existing images are generated through random noise processes, based on machine learning principles [2]. As a result, generated outputs often contain inconsistencies, such as skeletal misalignments or limb distortions. This study finds that integrating the OpenPose skeletal binding system with generative AI can better align generated human action models with realistic human movements, thereby improving the accuracy of image outputs.

Meanwhile, human pose recognition technologies have also been advancing. Against the backdrop of rapid progress in both generative AI and skeletal binding techniques, researchers have explored their integration by using skeletal keypoint diagrams from OpenPose as conditional inputs for generative models, enabling precise control of character postures in generated images[3].

For instance, Professor Ben Zhang and colleagues at the University of Chicago proposed the ControlNet architecture, which incorporates ″OpenPose skeletal conditions″ into diffusion models to achieve controllable editing of human poses in generated images[4]. This

integration allows users to construct images that meet expected posture requirements more efficiently, significantly enhancing the controllability of generative content.

However, as technological applications deepen, ethical and regulatory concerns are becoming more pronounced. These include the leakage of personal skeletal data, issues of copyright ownership in generative AI, and broader industry impacts. The industrialization of creative workflows risks constraining individual creativity, leading to diminished originality. From the perspective of skeletal recognition software, human skeletal data constitutes sensitive biometric information; such data can be captured and analyzed in public settings, raising serious concerns regarding data protection and privacy rights. In terms of generated content, generative AI may trigger copyright disputes and even facilitate ″ deepfake ″ risks, undermining information security[5]. Therefore, balancing technological efficacy with social value requires the establishment of appropriate regulations and governance mechanisms to ensure the healthy development of this field.

2.2. Research Objectives and Significance

This study focuses on the impacts, challenges, and opportunities associated with the application of OpenPose-based skeletal binding in generative artificial intelligence. First, it explains how the system integrates OpenPose with Stable Diffusion to enable precise control of image generation, highlighting its advantages and improvements compared with traditional approaches. Second, it discusses the challenges and opportunities that accompany pose-controlled generation. From a technical perspective, the analysis addresses the accuracy of skeletal binding, the efficiency of generation, and the computational resources required. From a regulatory and ethical perspective, it examines issues such as data privacy protection and copyright attribution. From a societal perspective, it explores the potential disruptions to existing industry structures, labor markets, and creative practices. Together, these considerations aim to provide a solid theoretical foundation and practical guidance for future optimization, application expansion, and policy development.

2.3. Methods for Extracting Human Skeletal Keypoints in Fall Detection

1.Literature Review

Relevant studies on OpenPose, generative artificial intelligence, and skeletal binding technologies were collected, organized, and analyzed. This provided an overview of the

current state of research and development trends in the field, laying the theoretical foundation for this paper.

2.Case Analysis

RepreseCase Analysintative application cases combining OpenPose with generative AI-based skeletal binding systems were selected for analysis. The evaluation of technical outcomes—including output quality and production costs—together with user feedback on advantages and shortcomings, offered concrete evidence for further in-depth investigation.

3.Semi-Structured Interviews

Semi-structured interviews were conducted with experts and practitioners in generative AI and related fields. The discussions focused on key issues across technical, ethical, and industrial dimensions. Their perspectives and recommendations were used to deepen the understanding of the applications, challenges, and dilemmas involved in integrating OpenPose skeletal binding systems with generative AI.

3. Development of OpenPose and Generative AI

3.1. Concept and Evolution of Generative Artificial Intelligence

Generative artificial intelligence refers to algorithmic models that learn from existing data and generate new content—such as text, images, or audio—based on that knowledge[5]. Its defining feature lies in modeling the relationship between latent and explicit spaces, enabling autonomous data generation beyond the limits of traditional discriminative models, which can only classify or predict[6].

Among these, Stable Diffusion and similar image-generation software represent the core of generative AI, built upon diffusion models. The essence of this approach lies in simulating the physical process of molecular diffusion in a data space. The process involves forward diffusion—where noise is progressively added to an image until it becomes unrecognizable—and reverse denoising, which incrementally restores the image to a clear state. Through this dual process, new synthetic images are produced.

3.2. Development of Skeletal Binding Technology: OpenPose

Alongside the advancement of generative AI, human pose estimation technologies have also evolved significantly. Early approaches relied on template-matching methods, while in recent

years, deep neural network–based techniques have become increasingly mature. Among them, OpenPose, proposed by the Perceptual Computing Lab at Carnegie Mellon University, is recognized as the first open-source, real-time, multi-person 2D pose estimation system[7].

OpenPose applies convolutional neural networks (CNNs) to detect keypoints of human body parts—such as hands, feet, and facial features—and connects these points into a complete skeletal structure. It can even recognize and analyze multiple human bodies simultaneously within the same frame. Beyond its applications in human–computer interaction, pose estimation has also been widely adopted in behavior prediction and activity analysis[8]. The release of OpenPose provided researchers and developers with a powerful tool to conveniently extract human skeletal information from both images and videos.

3.3. Application Domains and Representative Cases of Generative AI

Generative artificial intelligence has been widely applied across multiple domains. In the field of digital art and design, it enables rapid creation of illustrations, concept art, and advertising materials, significantly reducing creative costs and expanding artistic possibilities. In gaming and film production, generative AI supports automated character modeling, scene construction, and special effects generation, enhancing production efficiency while offering creative flexibility[10]. In the medical field, generative AI assists in visual simulations for surgical training, medical imaging enhancement, and rehabilitation research, providing valuable support to healthcare professionals[9].

Representative cases include tools such as Stable Diffusion and DALL・E, which allow users to produce high-quality images through simple textual prompts, democratizing creative production. Furthermore, the ControlNet architecture integrates skeletal keypoints from OpenPose as input conditions for diffusion models, enabling fine-grained control over generated human postures[4]. This represents a significant breakthrough in controllable content generation, bridging the gap between automated algorithms and user intent.

4. Analysis of OpenPose-Based Skeletal Binding Applications in Generative AI

4.1. Fundamental Principles of OpenPose Skeletal Binding

In simple terms, OpenPose is a tool designed for recognizing human posture and movement. It identifies keypoints of the human skeleton, enabling the addition, removal, and tracking of skeletal joint positions (Chen et al., 2020). Unlike traditional sensor-based approaches that

require wearable devices, OpenPose can directly analyze existing images and videos, making it possible to connect individual joints and establish them as the core components of a skeletal binding system (Jo & Kim, 2022). By detecting and tracking these keypoints, OpenPose provides reliable skeletal data, achieving superior performance and lower costs compared with other non-sensor-based posture analysis software.

4.2. Applications of OpenPose in Generative Artificial Intelligence

In the Stable Diffusion framework, OpenPose demonstrates high accuracy and robust skeletal recognition capabilities, even in cases where certain limbs are partially occluded (Otsuka et al., 2020). OpenPose is primarily employed as a practical plugin to standardize and visualize human postures in source data. Its key function lies in detecting skeletal keypoints from original images and generating a preview interface in which body postures can be adjusted (see Figure 1).

After generating the skeletal model of the original image, adjustments can be made within the ControlNet Unit interface of Stable Diffusion, where OpenPose (pose) can be selected for recognition. By modifying the keypoints identified through OpenPose, the basic movements of the character can be adjusted. This process allows for modifications of human actions without altering other features of the original image, such as facial expressions, clothing, or background elements (see Figure 2).

Figure 1. OpenPose Recognition in Generative Images

Figure 2. Generative Image after Skeletal Adjustment

4.3. pplication Domains and Representative Cases of OpenPoseg

OpenPose is not merely a simple plugin for generative AI drawing; it is widely applied in various scenarios involving human pose recognition. Within the context of AI-generated content, OpenPose is primarily used to improve image generation, enhance efficiency, and foster creativity (Park et al., 2020). By binding skeletal structures to complex and high-precision human movements, the generated images can better meet user expectations. In terms of efficiency and creativity, the combination of OpenPose with generative AI enables practitioners in different creative industries to save time, improve productivity, and unlock new possibilities for innovation.

The application domains of OpenPose and its associated industries are broad, covering artistic creation, animation production, game development, the medical field, media, and marketing. In artistic and animation production, artists and animators can use OpenPose to transform sketches and basic movements into corresponding skeletal structures, which can then be refined with Stable Diffusion to generate complete storyboards. In game development, skeletal binding techniques provide motion models for virtual characters and in-game avatars. In the medical field, real-time data extracted from videos or images can be used to analyze patient postures and movement patterns, thereby improving the diagnosis of skeletal or postural disorders. In media and marketing, skeletal structures can be employed to deliver more accurate recommendations for clothing and cosmetics. By applying skeletal binding to simulate product effects across different body types, companies can provide consumers with more valuable and personalized references.

4.4. Challenges

OpenPose and related software have introduced significant technological transformations, the emergence of new technologies inevitably brings new challenges. These challenges can be broadly divided into ethical concerns and risk-related issues.

From an ethical perspective, the collection and storage of human posture data during OpenPose analysis raises serious privacy concerns. Since OpenPose requires minimal input—merely images or videos are sufficient to perform skeletal analysis—any leakage of such skeletal data could cause irreparable harm to individuals' biometric information. Furthermore, modifications of body poses through skeletal adjustment may result in overly idealized outputs, leading to misleading or falsified products and functionalities. In certain cases, OpenPose-generated images of human analysis could be misused for malicious

purposes, such as creating identity recognition tools or producing unlawful content. For example, using pedestrian data captured from public spaces to conduct skeletal analysis and develop commercial products presents significant ethical risks (Bao, 2024).

From a risk standpoint, additional challenges exist. The accuracy of OpenPose image-processing software is closely tied to its training datasets and detection results. If the underlying datasets are flawed, the outcomes will inevitably be affected. Moreover, dataset construction often reflects the biases of its creators, which can compromise the fairness and reliability of skeletal recognition, resulting in unequal or inconsistent outputs. In addition, skeletal binding mechanisms may be exploited by malicious actors to generate deceptive images or virtual identities, infringing upon individuals' privacy rights. For professionals such as models or artists, the rise of OpenPose-based generative systems may disrupt existing employment structures, introducing new challenges to labor markets in related creative industries.

5. Semi-Structured Interviews

5.1. Application of the Semi-Structured Interview Method

This study adopts a semi-structured interview design. Two participants were selected for the interviews: one professional researcher specializing in generative artificial intelligence, who provided insights into technical concepts and represented expert users (hereafter referred to as V1), and one art designer proficient in using OpenPose for creative production, who, although less familiar with industry-wide development prospects, demonstrated strong practical expertise with the tool (hereafter referred to as S1). Through these interviews, the study sought to understand their perceptions and expectations regarding OpenPose and generative AI, their views on current applications and future development trends, as well as their reflections on the broader transformations in the field of artificial intelligence.

To ensure greater efficiency, the interviews were structured around problem-oriented anchors. For the purposes of this study, the core focus of the interviews with V1 and S1 was defined as an exploration of the impacts, challenges, and coping strategies associated with the application of OpenPose-based skeletal binding in generative AI, particularly in relation to ethical considerations and industry development. The discussions were categorized into three major dimensions: technical issues, ethical issues, and industry development issues. By analyzing the perspectives of both interviewees, the study derived concrete conclusions and

recommendations, which serve as references for future technical optimization and the establishment of regulatory guidelines.

5.2. Insights from Semi-Structured Interviews

The interviews with V1 and S1 indicate that the OpenPose-based skeletal binding system in generative AI has already been widely adopted across industries. V1 noted that such technologies significantly reduce costs and enhance efficiency in gaming and design but also raise challenges regarding copyright attribution and privacy risks, particularly since skeletal data can expose personal identity and health conditions. He further emphasized that the spread of these tools may weaken creative originality and reshape employment structures, with small studios increasingly replacing large corporations. From a practical standpoint, S1 highlighted the usefulness of OpenPose in pose confirmation and early-stage creation, which reduces labor costs and inspires creativity, though it also comes with pressures such as layoffs and declining market prices. Overall, both interviewees agreed that enterprises and practitioners must actively adapt to the rise of AI, strengthen legal and protective mechanisms, and maintain competitiveness through skill development or new employment opportunities.

Table 1.Summary of Semi-Structured Interview Findings

Dimension	V1(Researcher/ProfessionalUser)	S1(Art&DesignPractitioner)
Current Applications	Widely adopted in gaming companies and independent studios; replaces some sensor-based motion capture, reducing costs	Extensively used in image generation, especially for pose confirmation and early-stage creation
Efficiency & Quality	Efficiency improved through weight adjustment and distributed computing; complex motions require more resources	Dependent on hardware and platform; overall priority given to image quality
Ethics & Copyright	Copyright attribution difficult to define; training data involves original creators′ works; debates over AI′s independent style	Legal regulations are lacking; copyright remains in a gray area
Privacy Risks	Skeletal data may reveal identity, age, and health conditions; risk of misuse	Skeletal data and some personal information are sensitive; contracts and consent forms required
Protective	Noise injection and decentralized storage	Relies on corporate responsibility and future regulations; emphasizes bilateral

Mechanisms	enhance data security,	protection
Industry Impact	Increases efficiency but weakens originality; employment shifts toward small studios, reducing dominance of large companies	Reduces costs but leads to layoffs; declining prices, yet useful for inspiration
Practitioner Adaptation	Must embrace AI and apply data for personalized services	Compelled to learn AI tools to remain competitive; new roles in anti-AI detection emerging
Industry Trends	AI drives downsizing and assembly-line workflows, reshaping traditional industry chains	Shortens production cycles, lowers image prices; some clients insist on traditional methods but trend is irreversible
Corporate Strategies	Enterprises should embrace AI, lawfully collect data, and enhance personalized recommendations	Cost reduction and efficiency improvement through a ″reduced manpower + AI integration″ model

6. Strategies and Recommendations

6.1 Technical Optimization and Expansion of Application Scenarios

The current OpenPose skeletal binding system still exhibits certain technical limitations, such as the need for improved computational efficiency and inadequate recognition of non-standard postures. Future optimizations could involve incorporating additional data sources to enhance the system’s robustness and accuracy. Once optimized, both the binding speed of OpenPose and its adaptability to Stable Diffusion are expected to improve, thereby expanding potential application scenarios. Emerging areas of application may include rehabilitation training analysis in healthcare, performance posture capture in cultural and artistic practices, and fall-simulation modeling in educational settings.

6.2 Social Risk Management

As revealed through the semi-structured interviews, both industry practitioners and generative AI experts expressed concerns regarding data privacy in the current stage of AI development. This indicates that ethical and risk management issues are unavoidable in the evolution of artificial intelligence. Ethical risks primarily refer to scenarios in which AI may operate

beyond the control of creative teams, potentially developing forms of autonomy that influence the orientation of generated content. Due to the “black-box” operational mechanism of generative AI, existing technologies cannot fully account for or measure these processes. Although such developments may occur subtly, the absence of proper oversight could lead to significant consequences.

In response, major generative AI platforms have already introduced countermeasures, such as refusing to generate certain types of content, implementing keyword filtering, and inferring user intentions based on behavior. Beyond these, social and ethical risks also involve the storage of user data by generative AI systems. Data generated during user interactions may be exploited by malicious actors, leading to breaches of privacy and posing considerable threats to personal data security. To address this issue, transparent user agreements can be established to clearly define the scope of data collection and usage, thereby ensuring optimal protection of user information.

6.3 Industry Development Strategies

As indicated by the interviews, industries have, to varying degrees, been impacted by generative artificial intelligence. Consequently, development strategies should emphasize cross-disciplinary collaboration, encouraging integration between fields such as art, law, and other relevant disciplines. By leveraging AI as a tool, different professions can achieve resource sharing and promote sustainable industry growth. From the perspective of talent cultivation, it is essential to provide training for practitioners and incorporate generative AI into professional development programs, thereby fostering interdisciplinary talents equipped with both technical expertise and domain-specific knowledge.

7. Conclusion and Prospects

7.1 Conclusion and Prospects

Although the integration of the OpenPose skeletal binding system with generative artificial intelligence demonstrates broad application prospects, under current conditions the incorporation of skeletal posture constraints into generative AI significantly enhances the controllability of image generation and the efficiency of video production. By enabling precise control of human postures, skeletal binding software also resolves the critical issue of

consistency in generated characters, thereby exerting a substantial impact on relevant industries.

However, findings from the interviews also reveal that the application of AI software is accompanied by ethical and moral challenges. First, with respect to creativity itself, works generated by generative AI are produced on the basis of existing design styles and do not possess fully autonomous creativity. Creators are required to continuously adjust parameters to achieve the desired effects, rather than relying solely on inspiration. This suggests that traditional roles in the art and design industries may increasingly resemble those of programmers. As a result, the rapid adoption of generative AI risks rendering creative expression formulaic and constraining human originality.

From the perspective of intellectual property, numerous unresolved legal issues emerge, including whether AI-generated works can be considered to hold copyright, how ownership should be attributed, and whether datasets derived from existing personal creations constitute reasonable use.

Generative AI’s innovativeness injects new vitality into fields such as art, entertainment, healthcare, and education, but its uncontrollability and “black-box” risks must not be overlooked. On the one hand, its high efficiency will inevitably disrupt existing employment structures, profoundly affecting the livelihoods of current practitioners. On the other hand, this same efficiency will likely establish proficiency in generative AI as a mandatory skill in future recruitment, further diminishing the role of human creativity. Therefore, while driving technological innovation, it is crucial to clearly define regulatory boundaries. Technological innovation serves as the engine of industrial development, yet appropriate policies and legal frameworks are essential constraints for ensuring sustainable and responsible growth.

7.2 Future Directions of Industry Development

From the current trajectory of industry development, the integration of skeletal binding technology with generative AI is expected to advance along multiple dimensions. As human society continues to progress and technological capabilities improve, both hardware performance and algorithms will become increasingly optimized, making skeletal binding technology more precise and controllable. Existing keypoint recognition will gradually evolve into comprehensive human-form recognition, thereby enhancing the accuracy of posture detection. Generative AI will also transition from its current role as a tool for image and video generation into a powerful assistant across a broader range of industries. The advancement of

artificial intelligence is inevitable, and individuals must not only accept AI but also learn to apply relevant tools and software in order to keep pace with the future direction of societal development.

Appendix:

Interview Transcripts (Speech-to-Text)

V1 Semi-Structured Interview

VQ1: Do you think generative AI algorithms combined with OpenPose for skeletal binding are widely used in image generation?

V1: Generative AI right now... it's already in a red ocean state. You see, big gaming companies and even underground indie studios are all using it. Actually, quite a few gaming companies have already switched to skeletal binding software instead of traditional motion-capture sensors. Sure, the results might not be quite as refined, but the cost savings are huge. And some companies, you know, they don't really need super detailed motion capture, so they just prefer using these skeletal binding tools.

VQ2: So how do you balance efficiency and image quality?

V1: Well, some studios nowadays can kind of adjust the weights of skeletal binding depending on what quality they need. Like, if the movement is small and slow, they'll just use low resolution and low-power detection software. But when it's fast or with big motions, they'll switch to full-power recognition. That way it reduces the load. And then, yeah, some studios even use something like GPU logic—breaking down steps so that small AIs handle them like an assembly line, which boosts the overall efficiency.

VQ3: From an ethical point of view, how do you define copyright ownership for AI-generated videos?

V1: Oh, that's the tricky part, right? Like, who's the author of the final generated image? Some people say, "Well, I used the AI tool, so I'm the author, and the copyright belongs to me." But the thing is, all these AIs—whether it's for images or videos—they're trained on huge datasets made from internet images, videos, data, you name it. Basically, everyone who's ever uploaded something online has, in a way, contributed to those datasets. So who's the author, really? It's messy. For example, if my anime-style pictures are basically distilled from one artist's sketches, then who owns the copyright? That's super controversial. Take Miyazaki, for instance—he's strongly against AI copying his style. And then there's this interesting question: if AI training eventually develops its own "style," would the copyright belong to the AI itself? Fascinating, but also confusing.

VQ4: What kind of data related to privacy usually comes up when applying OpenPose with generative AI?

V1: Honestly, in today´s information society, it feels like everyone´s running around naked online. Like, when we use OpenPose, of course we need to test and debug, right? A lot of people will use their own body data for comparison. So, during that process, their skeletal data gets exposed. And there´s a good chance it ends up being captured and packaged into some public dataset.

VQ5: What privacy risks might be involved in collecting and using skeletal data?

V1: Well, I´d break it into a few points. First, our biological traits—like, skeletal structure can show your real age. Even your gait, the way you walk, is unique, so it can identify you. With a small dataset, you could actually pick out individuals by their unique skeletal traits. That´s a privacy leak right there. And from skeletal data, you could even figure out if someone has hidden health issues, like a slipped disc or maybe a sprained ankle. Then advertisers could push super-targeted ads at you based on your condition—making you more likely to click and even spend money.

VQ6: So, in that case, how can we build an effective prevention mechanism?

V1: Well, one way is adding noise to datasets—basically introducing some offsets to make the data unusable without corrections. It´s like a lock-and-key relationship. Or, you split the data up—head, limbs, torso stored separately—so nobody can directly call the whole dataset at once. Makes it harder to use and adds a protective layer.

VQ7: In your experience, how has this system affected traditional art creation workflows?

V1: The impact is huge. Before, when we did concept art, we´d fill sketchbooks with drawings to capture poses. Then came tablets and styluses. Now, with just a couple of computers, you can build base models. These days, people in the field are constantly tweaking parameters instead of sketching over and over again. In the short term, sure, it feels easier to make concept art. But in the long run, it might hurt creativity—because AI datasets can´t really do 100% self-generation, they rely on training and distillation. That makes our aesthetics drift toward formulas.

VQ8: How should artists and designers adapt to these changes?

V1: Honestly? It´s like a flood. Each of us is just a grain of sand in it. You can´t stop it—you just go with the flow. Most people are using AI now, even if they don´t love it, because it boosts productivity so much. Everyone´s basically turned into "alchemy masters," adjusting parameters endlessly to get the right picture, then polishing it in Photoshop or with AI tweaks. At the same time, some people are strongly against AI, so jobs like anti-AI detection are starting to pop up. As creators, maybe we should start looking at those paths too.

VQ9: From an industry perspective, what happens if AI is widely applied?

V1: Honestly, it kind of downgrades the industry. We´re using simpler tools to get more precise work. Expensive sensors and motion-capture gear? Not as necessary anymore. Big studios lose their edge, and instead you see lots of tiny studios—just a few people—but they can output work like a team of 20 or 30 used to. You also get assembly-line content—like short videos. Say you want to push an ad or idea: with AI video you can pump out hundreds, even thousands of clips at once, flooding people´s feeds.

VQ10: And what strategies should companies take?

V1: Well, mostly it's about embracing AI. Like, imagine in a clothing store—cameras capture your skeletal model as you walk in, AI matches it with clothing sizes in real time, and sales staff can immediately recommend fits. Conversion rates would shoot up. But of course, that only works if it's done legally and properly.

S1 Semi-Structured Interview

SQ1: Do you think generative AI algorithms and OpenPose are widely used in production?

S1: Yeah, this kind of skeletal binding software is used a lot, especially when you need to confirm body movements in generated images. So yeah, it's pretty common.

SQ2: How do you balance efficiency and image quality at work?

S1: Well… honestly, it depends on your computer power. If you're running models locally, you can batch-generate until you find the perfect image. But some people use online clients, like Liblib, where you gotta queue for rendering, which slows you down. Overall, we prioritize quality, though—AI images always have flaws, so we just tweak without messing up the main visual.

SQ3: From an ethical view, how do you define copyright ownership in AI-generated videos?

S1: Copyright in AI videos is always a big issue. Some websites already have policies for AI, but honestly, it's still a gray area. For us in the industry, we just use it—because laws haven't caught up yet.

SQ4: What privacy-related data usually comes up in OpenPose-based systems?

S1: Mostly skeletal data—things like age, height, limb details. That's pretty sensitive. Sometimes even personal info forms are attached—like addresses or phone numbers.

SQ5: And what privacy risks are there in real-world data collection?

S1: Same thing—mainly personal info risks. And of course, Google itself has its own privacy risks. But in my company, we'd never leak client data, so that's not a worry.

SQ6: So how should companies build preventive mechanisms?

S1: Honestly, it's not up to us. We need laws and regulations for that. Still, in our company, whenever we collect data, people have to sign contracts and consent forms. It's clear what's being collected and how it'll be used. And we guarantee we won't leak it. It's a two-way agreement.

SQ7: From your experience, how has this affected traditional art workflows?

S1: The impact's huge. For bosses, it's all about cost reduction—they can cut staff. Our company's already laid off a lot of people. Before, making one image took tons of planning and full manual work. Now AI can spit out a draft super quickly. Sure, it's not ready for commercial use yet, but for early inspiration it's gold. Saves us tons of sketching time and labor.

SQ8: How should artists adapt?

S1: Honestly, times are tough. Lots of layoffs. I've been lucky not to be cut yet. But it means I have to embrace AI, even if I don't like it. I have to learn the newest AI software to keep up. Otherwise, I'll fall behind. If you're in AI-related fields, you really need to understand how different tools work, their strengths, and then use them to stay competitive.

SQ9: What about the industry overall if AI is widely adopted?

S1: It's already hitting the industry. Before, making an image took days; now clients expect it in a day or less, because they know AI exists. Prices for images have also dropped like crazy—people assume you're using AI, so they lowball you. I think prices will keep going down. Big clients, though, still trust traditional workflows—some even ban AI. But honestly, in the future, even they'll probably use it.

SQ10: And for companies, what strategies make sense?

S1: Same as always—cut costs, boost efficiency. If a company can produce better images at the same cost with fewer people plus AI tools, they'll definitely do it. That's just survival in today's market.mbered.

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