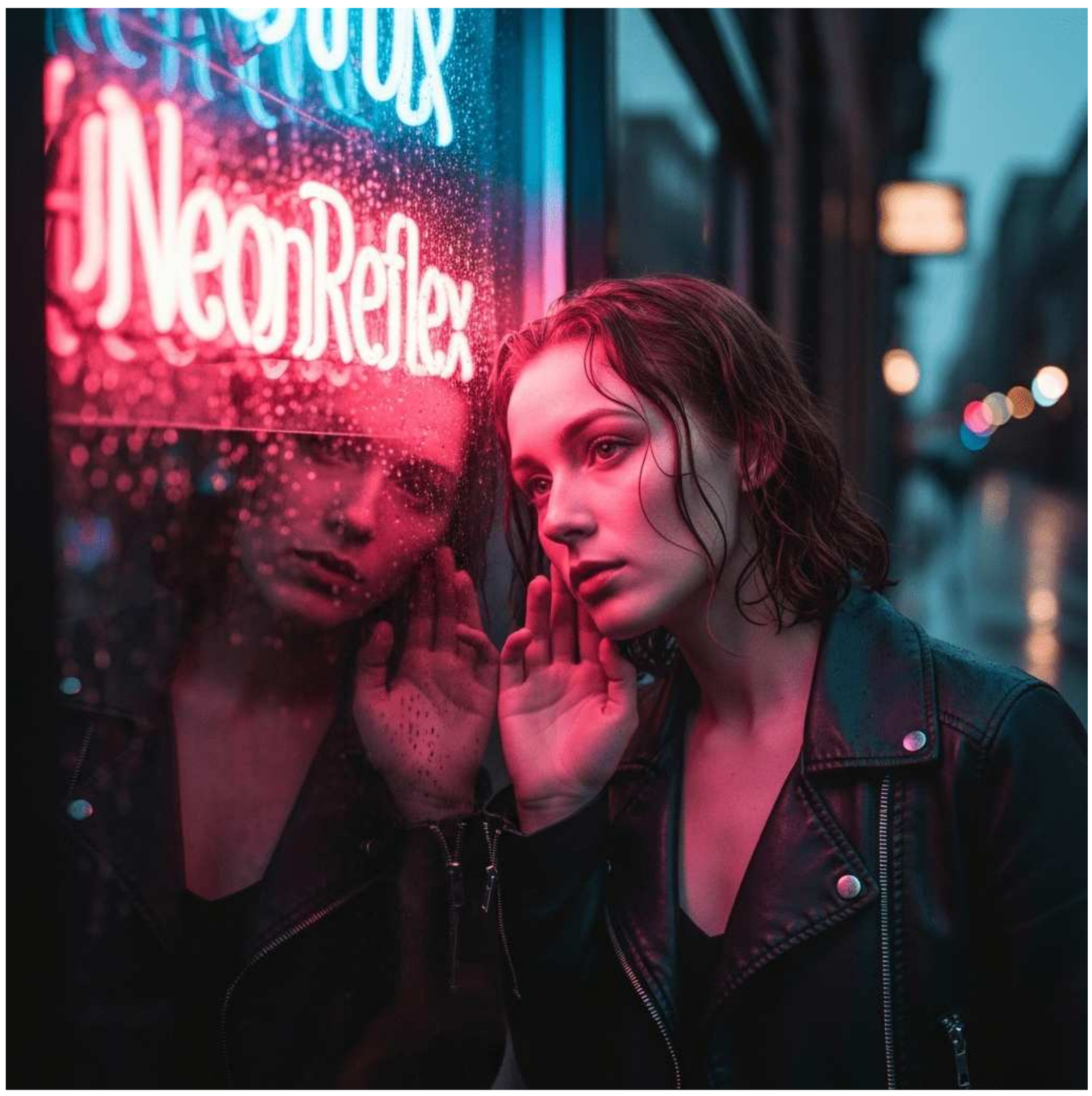
TAKZEN - KRZYSZTOF PIKA

Generative AI Photography: Creating Images with JSON



EBOOK

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CHAPTER 4

The Virtual Camera Bag – The camera Section

“The camera is an instrument that teaches people how to see without a camera.”
– Dorothea Lange

In traditional photography, the moment you choose a lens is one of the most important artistic decisions. Will you choose a wide angle to show the majesty of a landscape, or perhaps a portrait "eighty-five" to beautifully isolate the model from the background? Every equipment choice is a choice of language with which you will tell your story.

In the world of AI, we have the same luxury, but without the need to spend thousands on equipment. The camera section is your digital camera bag, filled with any camera and lens you could ever dream of. This is where you decide on the perspective, framing, and technical character of the image.

Here is the fragment of our plan that we will now fill with content:

```
"camera": {
 "type": "Camera model or type",
 "lens": "Focal length and aperture",
 "shot_type": "Type of shot",
 "angle": "Perspective"
}
```

Let's analyze how each of these keys gives you a new superpower.

1. type: **Image Character and Quality**

This parameter allows you to simulate the general aesthetic and technical features associated with specific types of cameras. It is a subtle but powerful hint for the AI. This parameter allows you to simulate the general aesthetic and technical features associated with specific types of cameras. It is a subtle but powerful hint for the AI.

Want a retro vibe? Try: "35mm film camera", "Polaroid 600", "Kodak disposable camera". The AI will add characteristic grain, slight imperfections, and a specific color palette.

Need hyper-realistic sharpness? Use: "Sony A7R IV", "Hasselblad X2D", "large format camera". This is a signal that you care about crystal clarity, a huge amount of detail, and a professional look.

Aiming for a modern, "smartphone" look? Type: "shot on iPhone 15 Pro", "Google Pixel photo". You will receive an image that looks like the result of advanced computational photography – sharp, with vibrant colors, and intelligently processed.

2. lens: **Focal Length and Depth of Field**

This is where the real magic happens.
The lens parameter combines two key elements: focal length (in millimeters) and the aperture value (the "f-number").

Focal Length (e.g., 24mm, 50mm, 85mm): Determines how "wide" the camera sees.

24mm (wide-angle lens): Ideal for landscapes, architecture, and scenes where you want to show a character in a broad context.

50mm (standard lens): Similar to the field of view of the human eye. Very versatile, great for street photography and environmental portraits.

85mm (portrait lens): "Flattens" the perspective, which is very flattering for facial features. It perfectly separates the character from the background.

200mm (telephoto lens): Strongly "compresses" the background, bringing it closer to the subject. Used in sports, nature photography, or to create the impression of observing a scene from a distance.

Aperture (e.g., f/1.4, f/2.8, f/8): Controls the depth of field, which is how large an area of the image remains sharp.
f/1.4, f/1.8 (low value = large aperture): Very shallow depth of field. Only the main subject will be sharp, and the background will turn into a beautiful, creamy blur (bokeh). This is the recipe for an intimate, isolated portrait.
f/8, f/11 (high value = small aperture): Deep depth of field. Almost everything, from the foreground to the horizon, will be sharp. Essential in landscape photography.

Example: "lens": "85mm f/1.4" is a portrait classic. "lens": "24mm f/11" is the recipe for an epic landscape.

3. shot_type: **Framing and Distance**

This parameter is the language of film and photography. It defines how close we are to the subject and which part of the scene we are framing.

close-up: A close-up on the face.
medium shot: A shot from the waist up.
full body shot (or long shot): Shows the entire figure.
cowboy shot: A shot from mid-thigh up (a classic from westerns).
establishing shot: A wide shot showing the entire location, introducing the viewer to the scene.
landscape shot: A landscape shot.

4. angle: **Camera Position and Power Dynamics**

Where you look at your subject from has a huge impact on the perception of the scene.

eye-level shot: Perspective at eye level. Neutral, natural, allows the viewer to identify with the character.
low-angle shot: Frog's perspective (from below). Makes the subject seem powerful, dominant, heroic.
high-angle shot: Bird's-eye perspective (from above). The subject seems small, vulnerable, lost.
drone view / top-down shot: A shot perpendicularly from above. Excellent for showing patterns, compositions, and epic landscapes.
dutch angle (tilted frame): Introduces unease, tension, or dynamism.

Virtual equipment in practice: Two looks at the detective

Let's return to our detective from the previous chapter. Let's see how the camera section can completely change the story being told, without touching either the style or the mood.

Variant 1: Intimate and personal

```
"camera": {
 "type": "35mm film camera",
 "lens": "50mm f/1.8",
 "shot_type": "medium shot",
 "angle": "eye-level shot"
}
```

Variant 2: Loneliness in the big city

```
"camera": {
 "type": "digital cinema camera",
 "lens": "24mm f/8",
 "shot_type": "establishing shot",
 "angle": "high-angle shot"
}
```

Effect: A completely different story. We look at the scene from above, with a wide eye. The detective is just a small silhouette on the sharp, wet streets of a big city. The entire scene is sharp (thanks to f/8), which emphasizes the vastness of the space surrounding him and his loneliness.

Do you see this power? We have only touched one block in our structure, and we have changed the entire narrative. Mastering the camera section is the transition from being an observer to being a conscious director and camera operator.

We now have the vision and the tools to capture it. In the next chapter, we will breathe life into our main character by covering the subject section.

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TAKZEN DEV is a fusion of creative aesthetics and precise technology. We create modern websites and AI applications built on a foundation of professional photography, industry context, and intelligent automation. We leverage the latest AI and NLP solutions, such as LangChain, RASA, and Veo 3.

Our Approach:

Visual & Functional Harmony: We bridge tradition with innovation.

AI as a Precision Tool: Context selection, accurate analysis, and content generation.

Interactivity: Dynamic and personalized user experiences.

Privacy First: All AI models operate locally, without external clouds.

What We Do:

AI Applications that automate business processes (chatbots, reports, recommendations, search engines).

Turn-key Websites & E-commerce Stores built with React/Next.js, easy to deploy and edit.

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TAKZEN Publishing

2025