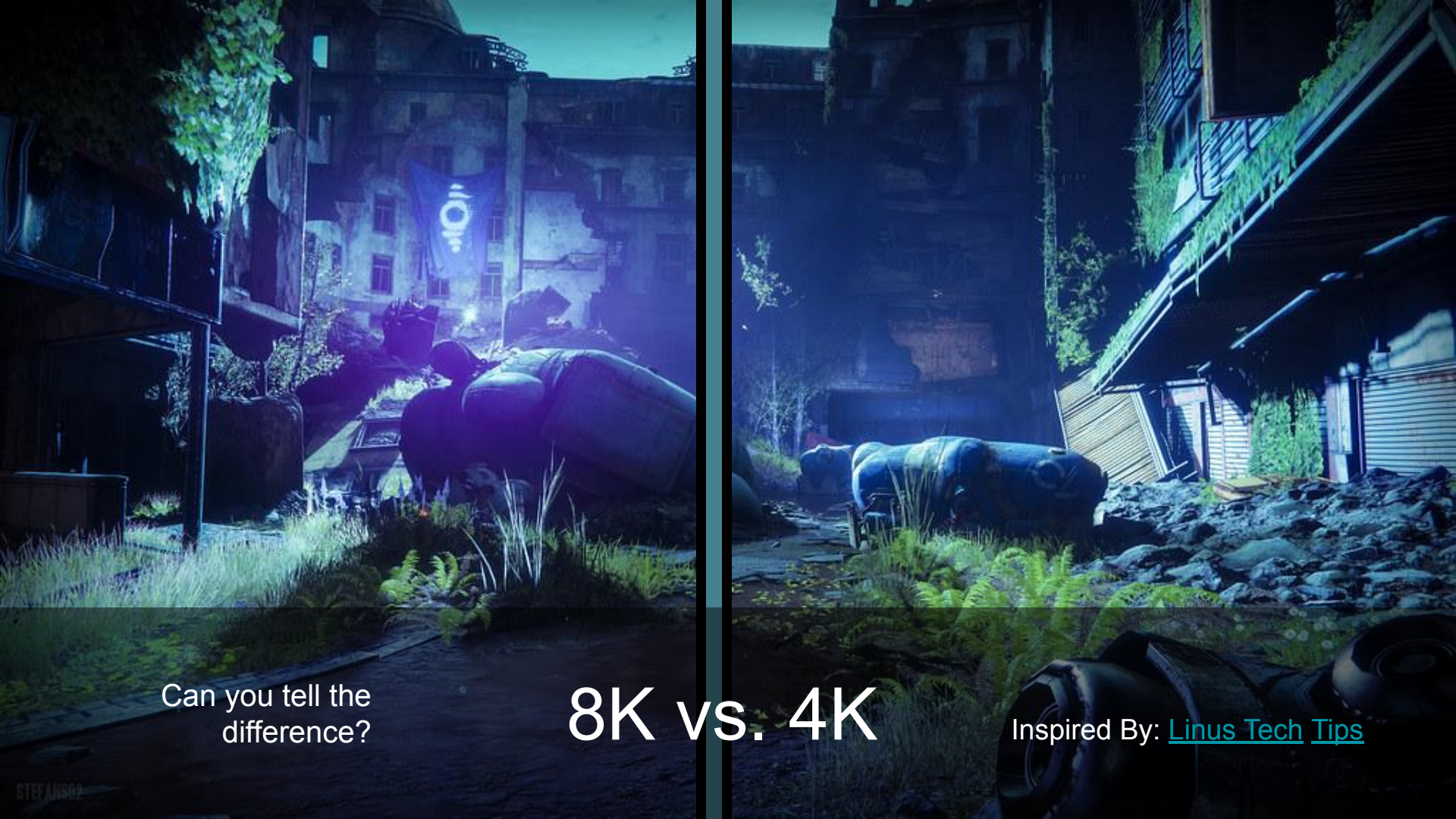
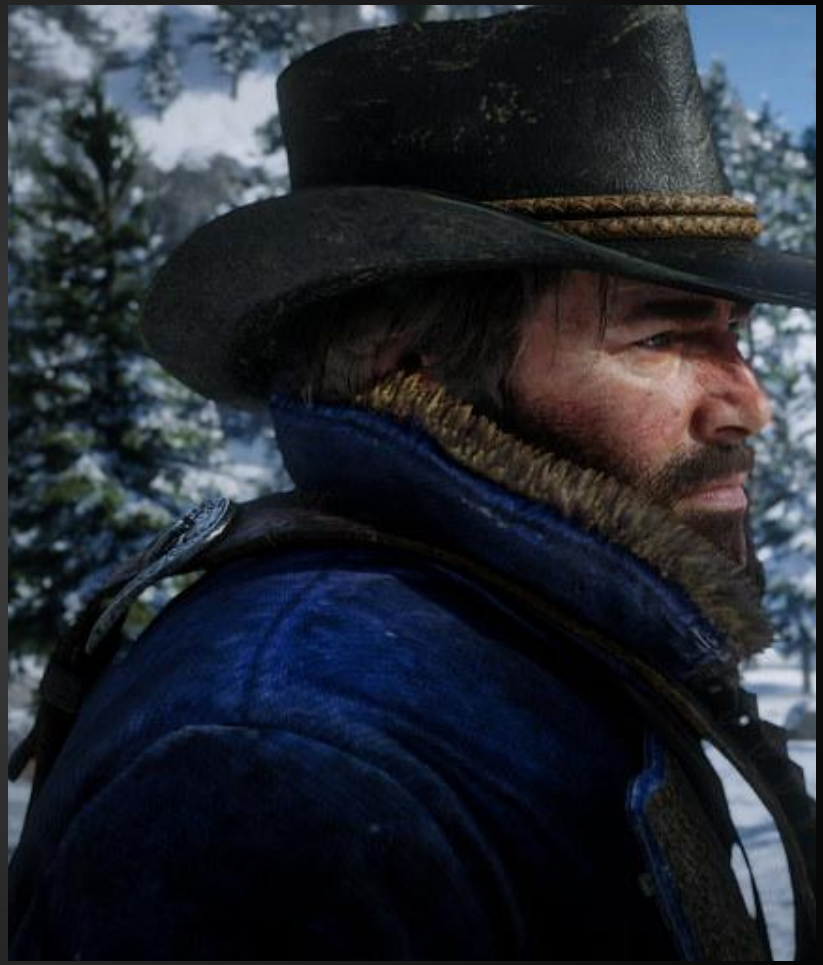

Can you tell the difference?
8K vs. 4K
Inspired By: Linus Tech Tips

Native 8K

On a RTX 4090, Native 8K is still notoriously hard to run, bringing many games and applications to their knees, begging for mercy and forgiveness. A benchmark done by Krispy shows Red Dead Redemption 2 running at native 8K, getting an average frame rate 30 per second. This would be a playable game if it weren't the 1% lows (every 100th percentile in framerate) running the game down to less than double digit numbers, not to mention that Krispy is paring his RTX 4090 with one of the best CPUs on the market, the Ryzen 7 5800x3D, having a tremendous advantage thanks to its giant increase and improvement in usable cache.

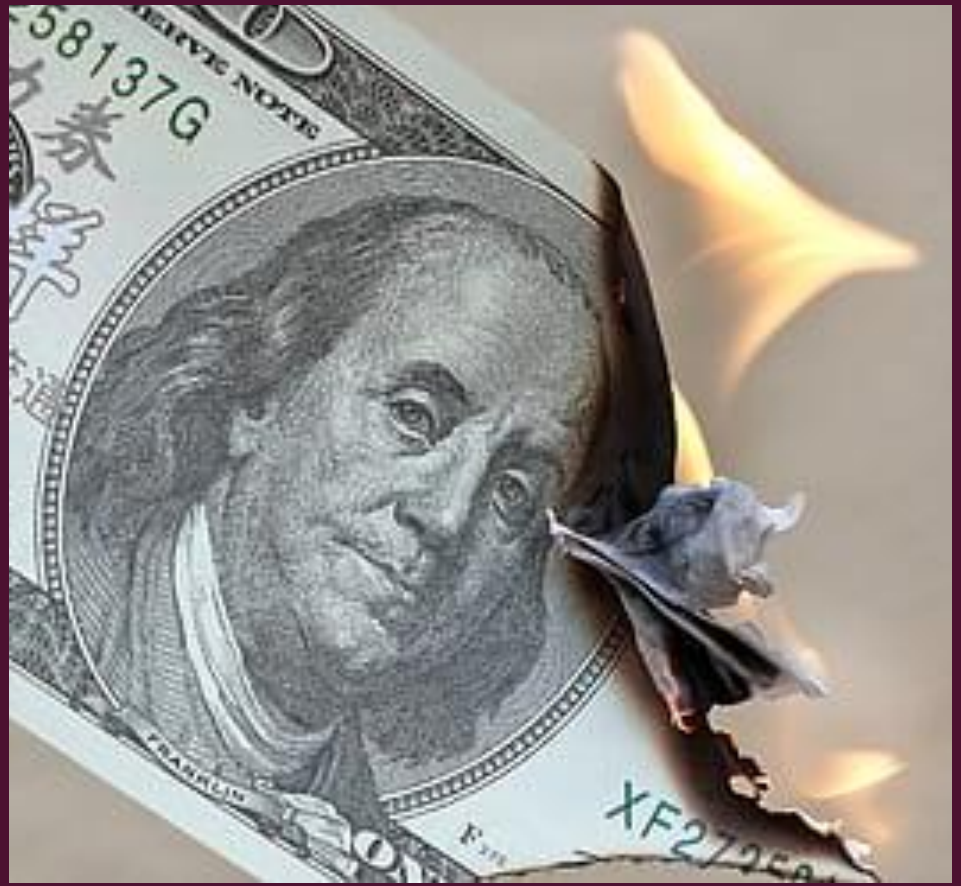


8K DLSS

In The Same Video at 8K with DLSS, things do start to look up. Red Dead Redemption 2 sees a tremendous increase in framerate with the addition of DLSS, roughly twice as much! As exciting as this may seem, I wouldn't go looking for your credit card just yet.

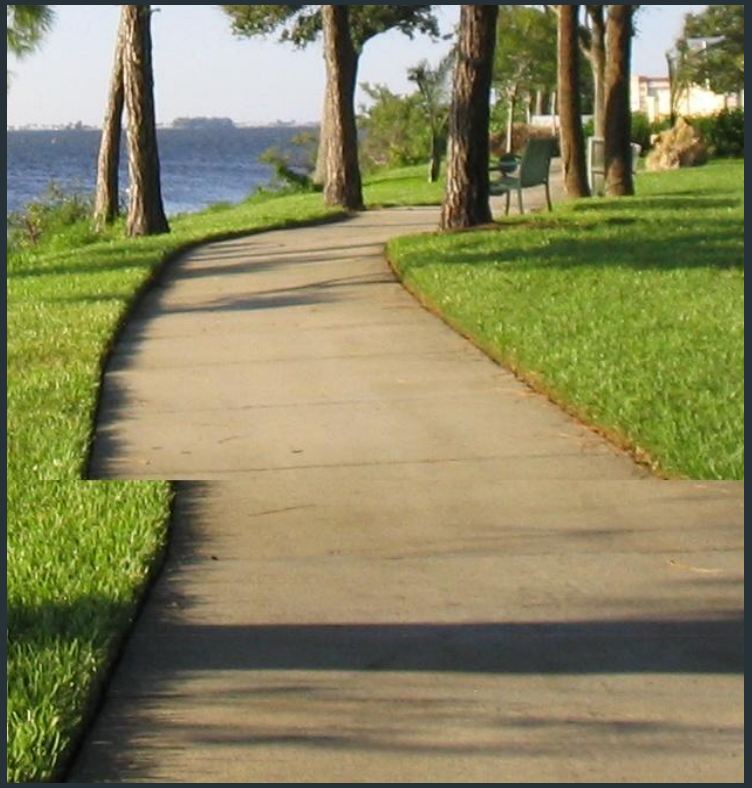
8K; Expensive & Indistinguishable

In a video by Linus Tech Tips, you can see that even with knowledge that the game is running at 8K, people can't tell without being an inch from the display, a display that will easily run you over 10,000 dollars! Today, you can pick up a 4K monitor for as little as $200. Because the display is almost 10 times as small, the image will appear sharper and you can sit closer without destroying your eyes… and this will keep your gaming system from becoming a fire hazard.



Native 4K

On an RTX 4090, 4K is little but a sweat and the difference in perceived quality is almost indistinguishable; furthermore, most people will benefit from more FPS than a higher resolution. As a relatively competitive gamer having an… aging PC, I can only subtly tell the difference between 720p and 1080p, and I'm completely unable to tell a difference when I'm moving around. There are clear advantages to having a faster frame rate, but little is to change by adding more pixels to a game where you don't need to notice every little detail. Overwatch 2 is a prime example of a game that requires a ton of moving in most cases. When changing from 1080p to 1440p, I could carely tell a difference. Because of the slower frame rate, I could see more visual screen tearing, which in my opinion, wasn't worth the extra pixels.



Conclusion

For the love of god, please don’t run your games at 8K! Even if your poor computer can muster a playable experience, you aren’t going to tell a difference. If you want an amazing looking game, 4K will certainly suffice. You also don’t need a $1,800 RTX 4090 to play games at 4K. In another benchmark with a more modest setup (W/ an RTX 3060 TI), Red Dead Redemption 2 plays at an entirely acceptable 50-60 FPS. If you wanted to have a smoother experience, you can always lower some settings, lower your resolution, or even turn on DLSS to gain some frames. It’s definitely not worth spending your college savings on pointless upgrades. That is all, thank You!