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A.I. War in Hollywood: The Battle for Control

David Lautrec deconstructs artificial intelligence



Physicist Dr. David Lautrec: "AI can be defined as the simulation of human intelligence carried out by machines. It's crucial to emphasize that this simulation is just an imitation of human intelligence, not a replication of life." -Image by: [NASA](#)

Palm Springs, CA (July 11, 2023) — My grasp of artificial intelligence (AI) isn't as thorough as I'd like, especially concerning its debated role in Hollywood. Many others likely share this uncertainty. Since May 2023, labor disputes, driven by Writers Guild of America and SAG-AFTRA, have paralyzed the American film

industry due to concerns over AI-driven job insecurity. Seeking insights, I pursued interviews on both sides of the debate, from AI experts to production houses and entertainment professionals. Guided by friend and legendary drummer [Alvin Taylor](#), I connected with the multifaceted David Lautrec, known for his roles as an Executive Producer, screenwriter, composer, musician, and actor, as well as his background in physics. Our meeting in the sun-soaked Coachella Valley revealed David's wealth of knowledge, adorned by his musical talents that haven't lost their shine over the years.

Initially conceived as a tech-focused narrative, the richness of Lautrec's background prompted me to incorporate a human-interest dimension. Below is my captivating and enlightening conversation with Dr. David Lautrec.

Joel: First things first. My car displayed an outside temp of 118 degrees when I arrived here. It was 78 when I left L.A. two hours ago. 118? That can't be right, right?

DL: [Laughs] That's normal for this time of year. It can even hit 120 on occasion. Although we have had more 115 plus days this year than last, any one summer day of this temperature wouldn't raise an eyebrow with us Desert Rats.

Joel: I'm glad your air-con works. How do you survive this heat?

DL: Many of our outside activities are before noon. But I've played tennis in 117 many times. I've lived here for 12 years, and one acclimates. Though, my first summer living in the desert felt like Hell on PEDs. I told my wife we moved to Hades. Hey, I have a pool in the back and spare trunks, let's take a dip later.

Joel: Done! Thank you for agreeing to this interview.

DL: My pleasure.

Joel: Do you prefer David or Dave?

DL: Either is fine.

Joel: Dave, your fascinating background deserves to be shared with the readers. Let's dive into your [IMDb](#) and [Amazon](#) bios to gain more insight into your journey.

DL: Sure.

Joel: You fly multi-engine aircraft and helicopters?

DL: Yes, I do. I sold my twin engine plane and my chopper years ago, so I haven't flown in a while, but my FAA pilot licenses are still valid.

Joel: You played for the Oakland Raiders football team?

DL: Well, somewhat, I was briefly on their practice squad in 1976. Luckily, the Raiders won the Super Bowl in 1977 for the '76 season, and I received a Super Bowl ring.

Joel: I've only seen a World Series ring; would you show it to me later?

DL: Of course.

Joel: You speak the Mandarin language?

DL: I do.

Joel: Mandarin allowed you to collaborate with Taiwanese director Kin Lo?

DL: That's correct. Kin was a good friend and my heart ached when he passed away.

Joel: May I test your Chinese?

DL: [Laughs] I'm rusty. I listened a lot to Mandarin programming on YouTube to stay sharp, which I haven't done in a while. I don't have much of a chance to speak natively anymore, except for when I go out for Chinese food.

Joel: Understood. How about, "I am late for my piano lesson because it is too hot outside?"

DL: [Without hesitation, Dave spoke what sounded like Chinese.]

Joel: I'll take your word for it.

[Note: This interview was recorded, and I played the verse Lautrec spoke to my waitress at a Chinese restaurant a few days later. To no surprise, it was accurate.]

Joel: I noticed a chess board here in your office. Is it true that you are a Grandmaster?

DL: No, that is not true. I am a Master. My highest rating was a bit above 2100.

Joel: That is still very impressive, correct?

DL: I do fairly well.

Joel: I play chess and I do fairly well, also. I'll take you up on the swim. And can we play a chess game by the pool?

DL: Absolutely, I don't get a chance to play very much these days.

[Note: We didn't swim — too hot outside for me — but played chess. I lost badly!]

Joel: Your array of skills and talents truly makes you an impressive individual. While we couldn't cover all the fascinating aspects of your background in our discussion due to time constraints, it is evident that you have led a remarkably rich and fulfilling life.

DL: Jack of all trades, master of...

Joel: It's quite evident that you have mastered quite a few. I am truly intrigued about your work in the sciences, however. I watched a video of a research proposal you gave on physics. You hold a doctorate in that field of study?

DL: My Ph.D. is in applied mathematics, which allowed me to amplify my mathematical modeling research in quantum physics. Although, I'm retired now.

Joel: What is "quantum physics?"

DL: Quantum physics is the study of the physical properties of matter and energy at the subatomic level. I developed and proffered a mathematical theory of what I termed, "contiguous quantum frames," which has now morphed into the theory of "loop quantum gravity." Loop quantum gravity may someday merge quantum mechanics and general relativity.

Joel: Alright, let's set that heavy topic aside. During our initial phone call, we touched on AI. I'm curious, do you possess a level of understanding about artificial intelligence that allows you to explain it in a way that's accessible to non-technical individuals like me?

DL: I possess a comprehensive understanding of AI technology, and I'll do my best to explain it in the simplest way possible.

Joel: That's why I'm here. So, what in the hell is AI anyway?

DL: Let's start by addressing the term "artificial intelligence." I hold a firm belief that this term can be quite misleading. In reality, there is no true "intelligence" in AI. Instead, AI is essentially a sophisticated computer program or algorithm. Although it is highly advanced, at its core, AI remains a computer program. Interestingly, if we consider the same terminology, we have been using artificial intelligence for many decades, ever since the inception of the first computer program that generated valuable output based on the logic it was provided.

Joel: So, you're saying AI is nothing special?

DL: No, the term is nothing special and misleading. However, the technology itself is groundbreaking.

Joel: Please continue explaining AI in simple terms.

DL: AI can be defined as the simulation of human intelligence carried out by machines. It's crucial to emphasize that this simulation is just an imitation of human intelligence, not a replication of life. AI is not a living entity and will never gain sentience or develop the ability to roam around Los Angeles on its own. While such scenarios make for captivating science fiction stories, the idea that AI

will become a new lifeform and overthrow humanity is rooted more in uninformed fears or alarmist perspectives from certain pundits. In reality, AI remains a powerful tool created and controlled by humans, and its potential benefits far outweigh any doomsday scenarios.



"I don't have real human thought, but I can amplify it." — Image by: Analytics

Joel: Indeed, there are those that are cautioning about the dangers of AI. You don't agree?

DL: In a word, nonsense. The world will be much better-off with AI.

Joel: So, AI involves machines or computers performing tasks that are human-like or, more precisely, imitating human-like actions?

DL: Yes, exactly. In the context of AI, it could take the form of a robot or a speech processor, among many other things. However, at its core, AI in its simplest form is just a computer executing tasks or controlling something else in a way that mimics human thought processes.

Joel: That sounds straightforward enough. And you believe AI is a good thing and not dangerous?

DL: As I said, it is a very good thing.

Joel: How? Why?

DL: For example, consider your heart surgeon facing critical decisions that could save your life, but instead of taking the needed seconds to diagnose and act, it would require minutes or even hours. However, with the help of an AI-powered assistant, life-saving suggestions could be provided in a fraction of a second and without any errors. Undoubtedly, this is a significant application of AI. Such uses of AI in the medical field have the potential to revolutionize medicine as we currently know it.

Joel: Can you give another example?

DL: Have you ever experienced credit card fraud? I have. Credit card fraud results in billions of dollars in losses for banks, businesses, and consumers each year. Currently, computer algorithms raise flags when a credit card transaction appears to be fraudulent, and then a human may step in to conduct further investigation. However, with the introduction of AI, we can expect near-instantaneous determination of whether a transaction should be denied. This process will be thousands of times faster than the current approach and save billions of dollars. In essence, think of AI as an incredibly powerful computer capable of extraordinary feats. The transformative impact of AI on the world, for the better, is a topic deserving of its own comprehensive 1000-page book.

Joel: Okay, please explain how AI actually works.

DL: Right. This can get a little more involved. However, keeping it simple, the following five steps are generally how it works.

One, data acquisition: AI accumulates a massive amount of data from a multitude of sources, such as the internet, academia, images, text, or any other source. This data is the crux of AI.

Two, modeling: The collected data is used to optimize or fine-tune the AI model. During the optimization process, the AI system analyzes patterns and correlations within the data to classify specific features or make predictions.

Three, predictions: Once the model is optimized, it can be used to make decisions or predictions based on new, unseen data. It analyzes the input and applies what it has adopted to generate the desired output.

Four, improvement: As the AI system makes decisions, it receives feedback on its accuracy. This feedback is then used to fine-tune the model and improve its performance over time.

Five, continuous feedback: AI is designed to adapt and optimize itself from new data. It continuously refines its modeling, becoming more accurate and efficient with each iteration.

These five steps form the fundamental process through which AI systems gather, process, and analyze data to make informed decisions and perform various tasks.

Of course, this is an accurate but very simplified explanation of AI functionality. A more in-depth analysis would result in complexities in my explanation.

Joel: So, AI is constantly learning?

DL: Once again, I don't agree with the term "learning" in the context of AI. A more fitting description would be that raw data is continually being acquired,

modeled, and analyzed by the AI system. The term “learning” often implies intelligence, which may not fully capture the essence of the AI process. For example, as we speak, your laptop is recording this conversation, adding our voices as new data to its hard drive. It’s not so much about learning as it is simply acquiring new data. Eventually, you will listen to its contents and write an article. This exemplifies the core of AI; Soon if not right now, it’s possible that AI could expertly write the article for you from the stored voice data.

Joel: The thought of my laptop writing for me leaves me in a quandary over its potential. While I will address the potential job implications later, I must admit that I now have a better grasp of how AI works. Given its apparent straightforward nature, it raises the question: why was AI not a prevalent concept, say 10 years ago?

DL: The primary reason was the limited processing power of computers. It’s only recently that computers have reached the capability to store and network vast amounts of data, essentially encompassing all the knowledge available on Earth. Additionally, the speed of today’s systems has advanced significantly, allowing for rapid modeling and processing of this data.

On a related note, consider the upcoming field of quantum computers. In the next few years, quantum computing will become widespread, and it will merge with improved AI technology, leading to a seismic shift in humanity comparable to significant discoveries like fire, the wheel, DNA sequencing, or splitting the atom. This marriage could unlock medical discoveries for humans to live indefinitely without aging or sickness, presenting both remarkable opportunities and challenges. [laughs] Though, car accidents will still be a problem.

Joel: How may AI affect the entertainment industry? How could it change the nature of Hollywood?

DL: This is a thorny subject. Indeed, there is the prospect of a profound effect on Hollywood, as well as all aspects of the entertainment industry. I emphasize that the potential is there, and it “may” happen. The industry comprising the employees and management are now actively discussing how to address the advent of AI.



[David Lautrec](#) and the Desert Redux Band in 2017 — Image by: [Desert Redux Band](#)

Joel: The initial part of this interview served as an informative introduction to AI, and you did an excellent job explaining it to us. Moving forward, we will delve into two other crucial aspects of our discussion: how AI will impact the entertainment industry from the perspectives of both employees and management. Let’s begin with the viewpoint of employees and performers in the entertainment business.

Given your extensive experience as an actor, musician, and composer within the industry, why would you, along with other such professionals, hold a strong opposition to AI in this context?

DL: Regrettably, AI has the potential to significantly impact employment in Hollywood, as well as the broader entertainment industry. This has understandably instilled fear in many individuals. Those who have dedicated years to mastering their craft may find their livelihoods threatened by AI's capabilities. The future may seem uncertain for them if AI takes over their roles. Undeniably, this transition is likely to happen soon and could have profound consequences.

One company at the forefront of embracing AI is [Netflix](#), which has openly integrated AI into its operations for quite some time now. This is evident in a recent AI job opening at Netflix, offering an impressive salary of \$900K/year, signaling the company's strong belief in AI's potential.

The impact of AI is far-reaching, sparing no one in the industry. Actors may face the possibility of being replaced by virtual and incredibly lifelike counterparts. AI can already compose music, tailoring emotionally stirring compositions based on the intended audience. Various roles in post-production, writing, data analysis, data entry, editing, artistry, voice-overs, and more are also at risk of being taken over by AI. For example, there is already an [AI screenwriting assistant](#) on the market that shows above-average capabilities, and one you can instruct to write in the style of "David E. Kelly."

Joel: The scale of what you are illuminating is huge.

DL: It is. To grasp the full scale of the potential disruption, consider that an average feature-length film typically requires around 700 personnel. If AI reduces this number to a mere 30, the implications will be far-reaching. Even indirect jobs, such as caterers, who will cater to a smaller crew instead of hundreds, will face challenges. As AI technology continues to progress, thousands of careers are at serious risk of being impacted.

Steering away from entertainment, AI has found successful applications in criminology, showcasing its potential in addressing complex issues in the realm of law enforcement and crime prevention. Moreover, approximately a year ago, an innovative engineer participated in an art contest, secretly submitting an AI-generated piece that went on to win [first prize](#). These instances serve as compelling evidence that AI's influence is rapidly expanding and will soon extend its reach across all aspects of society, leaving no domain untouched.

Joel: That's eye-opening.

DL: Absolutely, the potential impact is significant, and it could result in the loss of billions of dollars for entertainers and entertainment professionals. The very essence of their livelihoods is at risk.

However, let me add something important.

Joel: Please.

DL: Throughout history, every major implementation of innovative technology has faced its fair share of doomsayers. Take, for example, Henry Ford's introduction of the moving assembly line in the early 1900s, which was met with concerns about widespread job losses and lower wages. However, the assembly line's efficiency in manufacturing and the subsequent increase in product demand actually led to the creation of more jobs.

Similarly, during the 1990s, automation robots in manufacturing encountered similar fears, but their integration resulted in heightened competition, increased production rates, and the generation of new job opportunities.

The advent of computer and information technology, as well as the rise of the internet and E-commerce, also raised concerns about job displacement. Yet, the subsequent proliferation of jobs and opportunities in these domains proved so vast that they are difficult to enumerate.

I urge your readers to research economist [Joseph Schumpeter](#) who eloquently modeled how new technology affects society by, in the long run, driving growth, enhancing efficiency, and allowing for novel opportunities.

Joel: Thank you for that. Dave, you have 29 credits listed as Executive Producer or producer. I understand you have further uncredited roles in the same. Thinking as a producer, how could AI benefit this side of the business?

DL: Regrettably again, when it comes to Hollywood, AI presents a zero-sum proposition. Entertainment professionals face potential losses amounting to billions, while production houses stand to profit by the same amount.

To illustrate this, consider a modest mom-n-pop ice cream shop in the neighborhood with ten employees. Although the store generates decent income for its owners, they desire a little more take-home pay to achieve personal financial freedom. Now, a new “thingy technology” emerges that offers increased efficiency for Ma and Pa’s shop. However, adopting this technology would lead to the unfortunate loss of five employees. Now, the owners are faced with a difficult decision: Should they retain all the employees, terminate three, or terminate all five? They are not a social services agency, and their primary goal is to secure their own financial future, especially for retirement.

Of course, this example oversimplifies the situation. Production houses in Hollywood are massive businesses with substantial budgets. Take Disney Entertainment, for instance, with revenue reaching around \$13 billion. As a

publicly traded corporation with thousands of shareholders, Disney's management is under pressure to embrace readily available new technologies that cut costs and increase revenues. Failure to do so could lead to shareholder revolt and subsequent lawsuits. Many of these shareholders are not wealthy individuals and stand to benefit from increased dividends resulting from such cost-saving measures. The shareholders are not unlike the Ma and Pa ice cream restaurateurs.

This conundrum highlights the challenging dilemma faced by the industry. Balancing the interests of workers, shareholders, and the company's financial sustainability in the rapidly evolving landscape of AI technology is no simple task.

Joel: You presented the two sides very well. Do you have a suggestion for how to appease both sides of this debate?

DL: I definitely do not. I have talked about this very subject with many people and no one has a particular solution that is palatable to all sides. It's a tough problem to address.

Although AI may pose certain threats, it also presents new opportunities for entertainers and professionals. By collaborating with AI and leveraging its capabilities, they can explore innovative projects, enhance their craft, and reach broader audiences. Also, reskilling and upskilling must be integral. As AI continues to evolve, the entertainment industry will need to adapt and find ways to balance technological advancements with the creativity and artistic essence that defines Hollywood. That said, it's not a full solution.

Joel: Finally, to date, have you ever used AI directly or indirectly in any of your projects?

DL: No, I have not. The opportunity has not presented itself. I must say, however, that I enjoy and prefer working with real humans. The satisfaction of their smiles can't be replaced.

Joel: Dave, I very much appreciate your time today and your invaluable insight. Please, allow me to follow up on any significant industry developments.

DL: Absolutely. The pleasure has been all mine.

In summary, Solving the AI debate in Hollywood requires a balanced and comprehensive approach that addresses the concerns of industry professionals while embracing the potential of AI technology.

Firstly, fostering open dialogue and collaboration among stakeholders, including writers, actors, production houses, and AI developers, is essential to find common ground and identify areas of mutual benefit. Through meaningful engagement, industry players can work together to establish ethical guidelines and regulations for the responsible use of AI in entertainment, ensuring creative integrity and protecting intellectual property rights.

Secondly, investing in reskilling and upskilling initiatives for writers and actors can equip them with the necessary skills to collaborate effectively with AI and leverage its capabilities to enhance their work. By providing training programs that align with the evolving demands of the industry, Hollywood can ensure its creative workforce remains adaptable and resilient in the face of technological advancements.

Additionally, revenue-sharing models should be developed to fairly compensate writers and actors when AI-generated content yields profits. By embracing AI as a complementary tool rather than a replacement, the entertainment industry can

harness the full potential of AI while safeguarding the interests and livelihoods of its creative professionals, leading to a harmonious and prosperous future for Hollywood.

It will not be easy. For all our sakes, let's hope it's resolved quickly to the parties' mutual benefit and agreement.

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