

Humanity + Technology

As technology continues to evolve, its impact and influence upon our world and society grows. Here, two very special guests and leaders in their fields—Shingo Kunieda, wheelchair tennis great and currently the best in the world, and Emma Kalayjian, Automotive—Aerospace UX designer—joined us to talk about the relationship between humans and technology.



Shingo Kunieda

Shingo Kunieda is the greatest professional wheelchair tennis player in history. His career highlights include 29 men's singles titles (25 Grand Slam titles, plus titles won in the pre-Grand Slam era), a run of 107 consecutive singles wins, and gold medals in the men's singles division at three Paralympics: Beijing 2008, London 2012, and Tokyo 2020. In 2007, Kunieda achieved a wheelchair tennis calendar Grand Slam for the first time in the sport's history. He is currently ranked world number one in the men's singles division. (As of September 2021)



Emma Kalayjian

Building a career in the design and engineering fields of both the automotive and aerospace industries, Emma Kalayjian works as a UX designer. Emma recently established Spicy Carrot, a media company focusing on mobility. In 2021, she made the Forbes 30 Under 30 - Enterprise Technology List.

A society where technology and humanity are intertwined

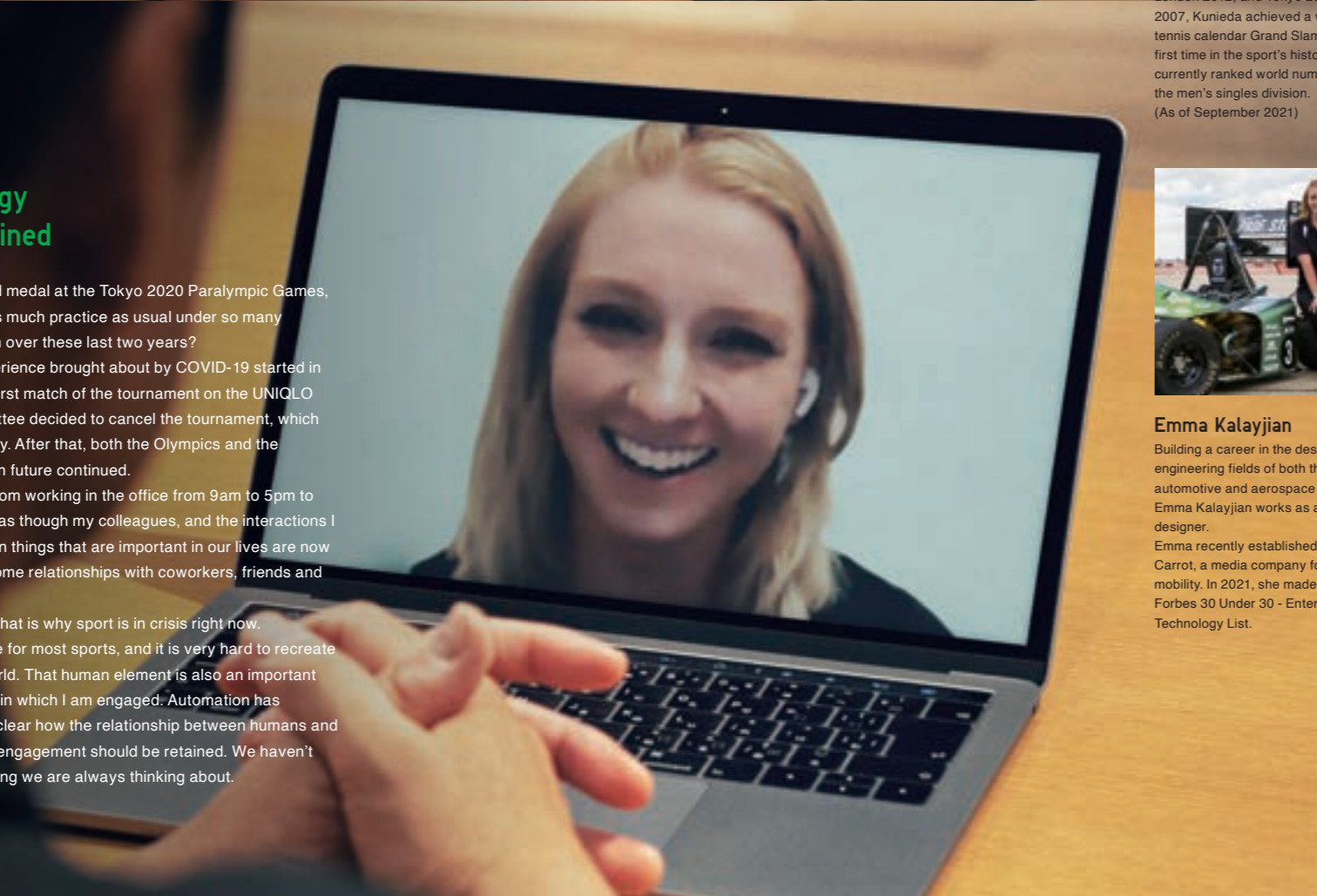
Emma First of all, congratulations on your gold medal at the Tokyo 2020 Paralympic Games, Shingo. I can guess you were not able to do as much practice as usual under so many COVID-19 restrictions, but how have you been over these last two years?

Shingo Thank you. My turbulent two-year experience brought about by COVID-19 started in March 2020. While I was warming up for the first match of the tournament on the UNIQLO Wheelchair Tennis Tour, the organizing committee decided to cancel the tournament, which resulted in me flying back to Japan immediately. After that, both the Olympics and the Paralympics were postponed, and an uncertain future continued.

Emma My lifestyle changed drastically, too. From working in the office from 9am to 5pm to working only remotely. At the moment, it feels as though my colleagues, and the interactions I have with them, exist mainly in my laptop. Even things that are important in our lives are now more intangible and non-physical. I feel that some relationships with coworkers, friends and family members have become virtual.

Shingo In sport, we cannot do things virtually; that is why sport is in crisis right now.

Emma You need an opponent and an audience for most sports, and it is very hard to recreate the energy generated by people in the real world. That human element is also an important theme in the automotive and aerospace fields in which I am engaged. Automation has progressed in both industries, but it is still not clear how the relationship between humans and cars should be changed, or how much human engagement should be retained. We haven't found the perfect balance yet, but it is something we are always thinking about.



Humanity overpowering technology

Emma You have been playing tennis since you were 11 years old. How have wheelchairs for tennis developed over that period?

Shingo Previously, all sports wheelchairs had aluminum frames. But the material later changed to magnesium, and even carbon is used these days. The lighter a wheelchair is, the more expensive it becomes. However, when skills and participation in the sport increase and the latest technologies are used more widely, the price will decrease over time. This creates opportunities for many more people to take advantage of that kind of advanced technology. On the other hand, we need to remember it is still ultimately a person who is playing tennis, even when cutting-edge technology is used. For the past five years, I have been testing the levels and angles of the seat. Changing the angle of the seat by only one millimeter makes the power transfer totally different.

Emma Just one millimeter? How interesting! That even calibrating, only fractionally, can make such a big difference.

Shingo Yes. Wheelchair tennis is not just about speed, but about a combination of movements, including turns. I tried using motion capture technology to get data, but I realized: when thinking about how to transmit power to a ball, it is not only objective data we must rely on, but also a player's own feeling.

Emma It is the same with design. Human emotions, including empathy, are important. When building user persona profiles, we need to interview dozens of people. We need to consider what barriers exist, and what we must do to overcome these. I'm sure for you there's also a degree of psychology that goes into it all, too. Obviously, athletes do so much physical training. What do you do to get mentally prepared?

Shingo Yes. After I incorporated mental training into my program, I moved up the rankings from 10th, to number one in the world. This type of mental training is really about how much you believe in yourself. Instead of feeling weak, if you can convince yourself that you are the strongest, then the power and the precision with which you hit a ball will go up. After a match, however, you also need to question yourself about what you are still missing to keep winning games. Otherwise, you can never improve both technically and mentally. That's something I have been pursuing with tenacity.

Emma You are your own biggest fan and critic, right? I really liked your choice of words: "tenacity." That's one of my favorite words. I always like to say, "embrace the art of elegant tenacity". And what I mean by that is this mindset of, "I'm here, and I'm going to achieve this. I'm not going away until I do."

Shingo Personally, I want to broaden public interest in sport. To do that, I want to continue taking part in tournaments. Specifically, the Paralympics were a good opportunity for many people to see and feel human potential, not only through wheelchair tennis, but also through other sports, like blind soccer and swimming, for example. It would be nice if I can help as many people as possible through my tennis, to learn about the potential of human beings and what we can do, even in wheelchairs.

Emma Looking for more people to broaden their interests...I have that kind of feeling too. I just started a media company, which offers information on the future of mobility. As to the future of mobility, we need to think not only about technological elements, but also about human aspects. What I want to do is create a bridge. I would love to do more outreach with high school students, for example. I want to present very technical topics in a non-technical, very left-field way. Because I think that is how you make these things appealing to people who have no interest in it. You appeal to them, and you bring out this common interest that you didn't think was possible.