



MODULE 6 UNIT 3

Video 2 Transcript

Module 6 Unit 1 Video 2 Transcript

NIR VULKAN: Well, here we are at the end of Module 6. Six weeks later, probably feels like six years later. But, anyway, well done on getting this far, and I hope that you have enjoyed the journey so far. Let me just say a few words to sort of wrap it up and what I think I would like for you to remember from this.

The importance of general principles

VULKAN: One of the interesting things is this tension I think you have seen between the new and the old. The idea of concepts like behaviour finance, Sharpe ratio, statistical verification or the out of sample, are relatively old concepts. Yes, they are, I don't know, 50 years old, some of them, are really, really, really important. In fact, they are even more important now with all these machines, and data, and power, and stuff that we have than they were in the beginning.

And I know you're probably sick of me and all the others in this programme telling you this, but this is the kind of make or break in this industry. And, believe me, I've been here a long, long time. I've seen people much, much smarter than me coming in and crashing because they didn't follow these principles. Not because their maths was wrong or the computing was wrong or not, but because they kind of failed to see the difference between explaining the past and predicting the future. And these are two different things. And so, you know, if you remember these general principles, I'm happy. I think you've learned something from this course.

Exciting developments around data

VULKAN: Having said that, there are a lot of very exciting things coming. First is new data, and you've seen, in this module, things like FactSet. We talked about satellite image. We talked about natural language processing, the fact that we can do sentiment analysis and all that kind of stuff really quickly.

Any new source of data is potentially interesting because, remember, we are always looking for an alpha, meaning we're looking for something slightly different, slightly better. That's all we do. I'm always worried when I meet people who wants to create systems that make, you know, that have a Sharpe of 20 and make money all the time, because that doesn't happen.

What can happen is if you have a system that is as good as the existing systems, but slightly uncorrelated. I can assure you that kind of system, if you make it into the market, will attract huge amount of funding because the way allocators work, because it's uncorrelated. So, any new sources of data that may have some kind of edge in it that that could be exploited would be useful.

And we now have this richness of data that we didn't have before. As I said, when I started 20 years ago, all we had was really price data. Just the open, close, high, low of the previous day or the previous 10 minutes or whatever. Even announcements like the Fed announcement of interest rates was something you had to code in manually. All of these things now are available as data that is clean and that is, you know, someone has produced

it so that you can start training systems on it and maybe, as I said, find some kind of an edge with it. So, the data is one area I'm excited about.

AI-enabled techniques: Transformers

VULKAN: The other is the new techniques, the new AI techniques that now emerge. And you've heard from Stefan Zohren, and I think you may have heard it from me in the beginning of this module, particularly, I'm interested in this idea of transformers.

Transformers came, the original paper was by three people from Google – they've all left Google since – and it was called "Attention is All You Need", and you can look up that paper. But the idea actually from translation. The idea that if you look at a sentence, or a bunch of sentences I said and you're trying to translate it to a different language, there's certain words I said earlier that sort of have more importance than others, and that's what the transformers did really, really well. That's what they call attention.

And I think that could be promising not so much on the rule level like the PFE system we looked before, but at the level that looks between different systems and sort of understands, like the stuff you have seen with Professor Zohren earlier. For example, that long-term trend isn't working now; we should switch to a short-term trend or even a min-reversion-type system. This is where I think the transformers can be really, really helpful. And I think this is an area that's forthcoming, and we might have new techniques, new kind of AI techniques that will be useful for us.

And again, bearing in mind that the same old principle of not trying to explain the past, but trying to predict the future, making sure that we are clear on what we call the out of sample or statistical verification, remembering that it's okay to fail and try again. If you keep these principles in mind, I think you will do well.

Creating a community

VULKAN: So, that's what I hope you remember from this programme. I know it's all kind of mushed in your mind after six weeks, but hopefully, as time goes by, something will remain with you.

I also hope that you will remain in touch with us. This programme has been running for a few years, and I have kept in touch with some of the people. There's at least three hedge funds that have been started by people who took this programme, and, obviously, they're only successful because they took this programme. That's not true. But I like staying in touch with students and helping when I can.

We can use LinkedIn to keep in touch with each other and with me. And we have the alumni network, which is a network of all the people who took these online programmes here in Oxford, and I hope that you will take advantage of it.

I hope you enjoyed the programme and go into the world and now use what you've learned here and do well. Good luck and stay in touch.

Did you understand all of the concepts in this video? If you would like to review any of the questions, click on the corresponding button.