Jeff Maurone: Hi, everyone. Alfred, thanks for joining us.

Alfred Lin: Thank you for having me.

Maurone: Peng, thanks for joining us.

Peng Zhao: Thank you.

Maurone: OK, so most of our colleagues in the room know about Sequoia but are getting to know you, Alfred. So why don't we start with a little bit of your background and the Sequoia partnership with Citadel Securities?

Lin: I'll keep it short. I grew up in New York, so thank you for giving me a reason to be back in New York City. I immigrated here when I was six years old. I was mostly good at math, so I went to study applied math at Harvard and a PhD in statistics, which I dropped out of to join a bunch of internet startups. LinkExchange, Tellme Networks and Zappos. And those were all sold to, one to- two of them to Microsoft, one to Amazon. And then, I joined Sequoia Capital in 2010. So I've been there for about 15 years, and I work with a variety of companies, such as Airbnb and DoorDash, and Kalshi that you saw before and Citadel Securities. We were invited to invest $1 billion, not $1 million, but $1 billion, into Citadel Securities. And, we graciously took it. So I get to work with Peng on this board. Usually, I ask the questions. So I was supposed to originally, I was supposed to moderate and ask questions because he always has the answers.

Zhao: Well, it's our conference, after all. We got to dictate the terms. Well, first of all, thank you for joining us on doing this. And, thank you for all the years of support and partnership. We can't thank you enough. And this is, you all just get a little glimpse of the brilliance that is Alfred Lim. No pressure. And thanks for.

Lin: Are you gang-tackling me here?

Zhao: And, thank you all for being here. I see a lot of familiar faces, and a lot of you I'm meeting for the first time. And a lot of you, I've met throughout the last two days. Even though they wouldn't let me out of the meeting room, I heard a lot of great things about all the amazing programs that the team has put on. So great, great, uh, program That we've put together, and many thanks to the team as well.

Maurone: OK. Awesome. So let's start with the AI hype cycle. Help our colleagues in the room navigate this challenge. Right. So on the one hand we have companies like Salesforce.com and Marc Benioff saying we're not hiring any more engineers. Agents can do the job. On the other hand, you have Harvard Business Review coining this term 'work slop.' That the primary contribution of AI is a bunch of questionable-value output,

and 95% of pilots don't generate any real value. So maybe start with you, Peng. Is AI driving the future of markets? Is it already transformative? What's real? What's not?

Zhao: Yeah, I mean it's a very important question. And it's by far the most commonly asked question through all my conversations today, yesterday and quite frankly, it is the most commonly asked question and topic for discussion that came up in all of our meetings with our clients, including many of you in the audience. I think it deserves a bit more nuanced answer. Right. It's not a 'yes' or 'no' answer. I think we're moving past this phase where we're just trying to get our workforce to be AI-literate. I think a year ago, the advice I was offering was, "Hey, if I'm having a lot of fun playing with ChatGPT on my phone with my daughter, and if I've done that, you should start doing that in your personal life." I think over the last 12 months, most companies, have either already plugged some form of AI agent on their employees' desktops so they can continue to learn to interact with it and figure out a way of getting comfortable with this new way of either writing our emails or writing code or helping you in your research process. Just like how we have learned to use it in daily life. So we're, more or less, past that phase. Today, I think we're facing a much more challenging task, which is actually leveraging AI in driving real productivity gains. Not in some of the activities that is part of our daily work life but some of the core business activities that actually drive the success and failure of our businesses. And that's been much more challenging. And to answer that question, I think it's important that we separate the two concepts. One is machine learning, the machine learning models and algorithms and the engineering techniques that powers these AI algorithms, whether you're referring to large language models or some of the agents or the ones that can generate funny cat pictures that for you and your daughter. Or me, in that case. Machine learning has been underlying the transformation of capital markets over the last 20 years. And we how do we know this? We've been one of the driving force of exactly that, right? So when you go and trade a share of stocks in the U.S. on the New York Stock Exchange, more than 50% of the volume is actually machine to machine. It would be an algorithm that you're using interacting with the algorithm that likely a market maker is using. And what powers and informs those algorithms are already very similar models, and underlying engineering platforms that powerful- that powers our LLMs and the various different agentic AIs. I think from that perspective, it has already transformed the capital market, and that transformation has started 23 years ago, at its latest, when Citadel Securities became an option market maker on the CBOE floor. Technology, automation, predictive analytics have been the core and continue to be the core engine of what drives our activity in markets day in, day out. The more interesting question and the more controversial question is what about AI in the literal sense? Forget about the machine learning models. That's a cop out Peng. We know about that part already. What about these things we can buy from one of the enterprise functions At one of the AI

companies or hyper-scalers? I think that's a trick here. Right. So, in case you don't know me, I also studied statistics. I did not drop out. I got my-. He finished. I got my PhD, and I had the good fortune that some of the work that I did at grad school were the precursors to a lot of the machine learning algorithms and AI that we get to use today. But I wake up every morning, continue to struggle to think, answer the question, "How do I increase the beta that we are as a business to the ever-evolving sophistication of AI?" And that's not an easy answer to arrive at. Right? And it cuts both ways. I think on the one hand, there's a real sense that, hey, in case this continues to take off, it may take longer than what the valuation of these private companies may lead you to believe, but it's happening at some point. Some form of breakthrough will start changing one aspect or another of how we do our daily jobs. But instead of being on the frontier trying to push for that trend, the job and the responsibility for someone in my position, and in your positions, is to figure out 'How do I build and increase the beta that we have to this unstoppable trend?" And that's been the case for all the different waves of technology we have witnessed. And this is just the latest one and which has the potential of being the most disruptive. And it does take a combination of deep, deep technical expertise, which I would have, I would think, among leaders within financial services, I'm among the most informed and knowledgeable, but also real understanding of how capital markets operate. And that's not unique to capital markets. That is true for other industries as well. So with that kind of challenge, and it's a difficult question, but also a very important question, I think companies are faced with one of two choices. It's either one, you're committed to have the talent, especially at the leadership and decision- making level, to know what to bet on so that on the one hand, you are making some form of a bet but also making sure that the chance of the trade-off between you wasting a bunch of resources and human time, chasing after the various different things. You know, in one downside scenario, it's a source of cost. Energy lost. But in another cost scenario, a downside scenario, there could be real risk of AI despair and AI fatigue, which is reported at some of these companies. Or. Perhaps, stay on the- within the vicinity of the frontier, acknowledging that maybe the talent base or the leadership is not in place. But let's stay informed. Let's find the right partners in our industry and in the tech industry so that we take this journey on together as partners. And, this is a little bit of a marketing, but it's true. We have noticed fairly early on, over the last 12 months, that the most common and dominant topic that comes up is AI. So instead of coming into these meetings sharing our latest view on macroeconomics or any particular company, we have quickly made available our technical expertise and leadership to participate in these conversations. We don't have the answers yet, but what we have been doing is sharing our experience. We're privileged to have partners like Sequoia, and we can tap into the broader network of Sequoia's portfolio companies and friends on the West Coast and all over the world. We're also privileged to have various different experts in related fields, including

machine learning, AI, statistics, mathematics, physics, electrical engineering, you name it. So we are staying on that cutting edge, and in some ways, not just for us, but for all of us. So while I don't quite have the literal answer to Jeff's question. What we are here to do is, we are trying to answer that question, not just for us, but not just for ourselves, but, hopefully, for us and our partners broadly. And we are happy and eager to engage with you as you ask these questions. I can't tell you how much of this is going to be a bit of a bubble burst or a letdown. And nor can I tell you exactly how that's going to transform your investment process, for example. But we want to be your partner on that journey, just like we want to be your partner in many other journeys in ways that we can, be, embedded more into your day-to-day and find ways to add value. So that's ...

Maurone: OK. Thanks, Peng. On that topic of valuation, let's consider the same question from a different angle for Alfred. So Matt Levine, writing in his Bloomberg column last week, "If you're a top AI researcher, probably a lot of your friends are also top AI researchers. If you all got together, you could, one, hang out and have fun and, two, also do some top AI research. Then you could go to investors and say, 'Hey, look. Top AI researchers here. Give us $1 billion.' If the investors question what you're actually building, you just take a step to the door and the investors say, 'Whoa, whoa, whoa. We don't know what you were thinking. Here's $2 billion.' So it seems like adding 'AI' to your name has become what adding '.com' was to your name in the late 90s." How do you think about this? How do you think about investing through these cycles? And how do you see the difference between real value and that discussion that Matt quotes?

Lin: It's very hard. I would, like, Matt is a great writer. The numbers are a little exaggerated and maybe 10 versus 20 million, maybe 100 versus 200 million. Very few people are able to raise $1 billion or $2 billion. There are some. I'm not saying there are not. It is true that right now, if you add AI to your business plan, it gets a higher valuation. But it's our- the question we always asked is, is AI something that you're native to or are you just slapping it on? And I think there's a slight difference between slapping it on and you actually don't know that much about AI and it's core to your business. Or is it just a tool? And if you're a wrapper around ChatGPT, you're going to get a very different outcome than if you are doing something that ChatGPT cannot do or OpenAI cannot do. As an example, the the sort of things that are valuable are unique data, which certain people have. There's unique insight to how you use that data. There's the people who can make the algorithms work. And then there's the workflow. If you have all of these, like Citadel Securities have, you're going to be very, very, capable of bringing AI to the next level. If you have one of those, you're going to be capable of doing something with AI. If you have none of those, just simply say you're an

AI company and you're going to put your work on top of ChatGPT or, GPT-5, that's not going to work.

Maurone: Yeah. So there's something here about being customer-obsessed, - being - Go ahead.

Lin: Can I just pop up a level about AI? I just want to reinforce what Peng just said. We've been working on AI since 1950. OK? You guys in the financial services industry is where all of the startups and Sequoia want to sell to second. The first ones are other technology companies because they're early adopters. You guys have the biggest pockets. And the one thing you should think about is where along the way, you want to be an early adopter, a mid adopter or a late adopter. You don't have to be an early adopter, but you should pay attention. And I think that skepticism on AI will happen again. In 1950, it was invented when, people, when Alan Turing decided to sort of create the Turing test. We've gone past the Turing test, and we've gone through many iterations of AI, machine learning, convolutional neural nets. There's these terms that people don't know or remember, but there's some of these terms, like large language models. Yes, they're new. Deep learning is new. But this generation of deep learning is different than the previous generation. But we've been working on this for a long, long period of time. We just didn't have the compute to make it work. Now we have the compute to make it work. We didn't have the data to make it work. Now we have the data in the cloud, so you can train on that. Most of what ChatGPT has been trained on is the open internet. If we didn't have the open internet, we would not have something that's capable of going out and searching a bunch of things and coming back with a summary. If you really think about it, the only addition to Google is a summary of all the things and going through all the links, reading the thing in those links and summarizing and sending it back for you. But you know what? Humans are lazy. So when it first happened, it looked like a toy. But now it's replacing 10% of search on Google Search because you can make ChatGPT your default search engine. Well, it actually replaces close to 25, 30% of search for Gen Zs because that's where they start using it. So is it powerful? Yes. Does it have problems? Does it hallucinate? Less so than the first few generations. But hey, you know, when you are, when you hired junior analysts, did they hallucinate as well? Probably. Did they make mistakes? Probably. And so I would just go back in history and just study the internet, the smartphones, etc. When this device came out, one of the companies that are no longer in existence thought this company was a toy. This is not a toy today. It was a toy when it first came out. Was PDAs going to be the defining thing? No. But the people who work in technology will learn from customer feedback from all of you that the PalmPilot was not that good. The stylus was not that good. The BlackBerry was good for email and for texting, but not for browsing. So technology's job and in science's job is every problem that you bring up

has a solution. And every solution creates a bunch of new problems that they're going to go solve. And so there's going to be constant progress. So I think we're in a world of accelerating change, and AI is accelerating in a, in a form that we haven't seen before mostly because there's a consumer application to show you that. But the work that Citadel Securities have been doing with trading, I mean, the fact that more than 50% of trades are done machine to machine, which is what I learned at the last board meeting. That shows you that technology is going to keep disrupting financial markets into the future. You know why? Because you guys are the biggest consumer of technology and automation.

Maurone: Yeah. So there's something clearly there about evolving customer preferences, evolving business needs. And to some extent, AI responds to that. To some extent, AI drives those changes. Right? So if you take three companies you're deeply involved with. Right? Zappos in history, DoorDash and Airbnb. Right. So these are, in my view, three companies that very fundamentally are about meeting customers where they are, particularly when those customer preferences are changing because of all of the foundational technologies that you mentioned. Tell us more about that culture and the way in which those businesses that adapt and lead that change run and operate.

Lin: That's a very interesting question. And I would also just say that there's no company I've ever met that thinks that they're not a customer- service culture, and maybe the service part, a client-focused part. The focus part is not the right word. And, you know, we said this at Zappos, and then we were acquired by Amazon. Amazon says this is to be customer- obsessed. And there's an obsession related to what does the customer want and how do we solve their problems? And sometimes the problems are obvious. The solutions are obvious to the problems. Sometimes, the problems are obvious, and you should just solve it for the customer. That just shows customer obsession. Why do you let the problem happen and then have the customer tell you when it was obvious that you should have solved it yourself? That's like rule number one. If you, if there's any friction in your product, you should actively remove it, not allow it to happen for a long period of time until the customer complains. Number two, if the customer says this is a problem, and you're like, "Oh, I never thought of that," that's a good thing to sort of think about on how you could have potentially figured out before the customer told you. But also, just solve their problem. And then, number three, which is what Jeff Bezos always talked about, which is, if you do number one and number two, number three is to invent on behalf of the customer. And sometimes, when you invent on behalf of the customer, you may be right, and they may be wrong and vice versa. But you have to have conviction on what you're inventing. The people who sort of produce the PDAs, even though the customers didn't like it, they had

conviction that one day we would have mobile devices. Was the form factor right? No. But they just had real conviction that what they're inventing was going to be very, very productive for the customer. And I think, you know, those three companies will take that in different ways and use it in different ways. What's the most important thing for Airbnb? It's to have, sort of, this community of people, guests and hosts that want to provide hospitality. They want to be good guests, and they want to be good hosts. There's an ethos behind what a good customer experience is. In DoorDash, it was really interesting because they didn't say customer experience was the end consumer. It was about the restaurants and the merchants because Tony had a love for merchants. In Zappos' case, we just found that the way the customer service was being automated was the antithesis of customer service. And so what we learned is, like, there's a brand of customer service. So Amazon's form of customer service is that if you contacted them, whether it's an email or a call, it was a bug in their system. So instead of answering the email or the phone call in the early days (obviously, they answer them now), they would just not answer them and fix the problem in the product. In Zappos' case, our brand is to answer all of them and to give you a high-touch experience, even though it's an e-commerce site with low, with relatively low, margins. And we did that and produced this, like, meme of what it means to provide customer service because nobody else wanted to pick up the phone. And we put the phone number on, our 800 number on the front of every single website. And these kind of things, your choices of what you mean by customer service accrues to the brand of the company. And if you don't have a particular point of view of what great customer service is, and you just provide customer service like everybody else, it will be customer service. It will not be seen as customer obsession.

Maurone: Yeah. So Peng, let's approach this from our perspective from Citadel Securities. So what I heard from Alfred, anticipating your customers and issues before they see them themselves. So listening to your customers when they're actually doing you the help of telling you a problem and innovating on behalf of your customers, not just who they are today, but who you have conviction they'll be in two, five and 10 years down the road. What does that mean for Citadel Securities?

Zhao: Yeah. I'm sure you've heard this so many times, but it's worth repeating, I think. Citadel Securities is built on a singular vision that technology, predictive analytics and automation is the future of making markets and trading in capital markets. And we've been practicing that for the last 23 years. For most of those 23 years, we've done so in a way that's quite invisible from all of you and from the rest of the market, even though the transformational impact that we've had on the capital market has been tremendous. I'm sure you've heard how much we can reduce the spread. I'm sure you've heard how much we have helped to reduce the trading commissions for retail

investors in the United States. We've done all of that. And if we've done our job well, the way you have traded yesterday will continue to be the way you traded the day after. It's just a little bit better. We've gone so far as thinking through, the various different tail scenarios that may come during times of market stress and disruption. I was asked this question, a related question, earlier today, which brought back a memory of this data point. During the meme-stock frenzy, we were able to operate through that entire episode with zero seconds of downtime. And that was actually no easy feat. That was only possible because we planned for six times the capacity of the previous market peak. And why was it six times? Because one, you're starting off to say, "I need to have enough capacity for the highest amount of volume of message rate I've ever seen." That's your starting point. Now, obviously, your next market peak is going to be higher than the previous one. So you double the whatever the previous peak was. But then, we told us, we hold ourselves, I mean, then we thought to ourselves that, "Hey, I don't think our competitors is going to spend a tech budget to plan for that kind of market peak and disruption and volume that they need to handle. What if they all go down. And if we're 35 to 40% of the market and then to triple my capacity yet from there on out." So we literally went through that math and planned for six times the capacity from the previous peak capacity that we needed. And we almost had to use all of it. So a very tax-centric, anticipatory, planning tech roadmap allowed us to be there when our clients and customers needed us the most. And that was the case during each individual one of the market meltdowns and melt-ups that was there during each one of the crises that was in the marketplace. We think about how do we scale the way we serve our clients during the times of stress, rather than how much doing now cost us on a day in, day out basis? And that is based on a belief in how we show up during those moments. Clients will remember it and will build. And that may not mean more business the next day. Oftentimes, it does mean that, but it means that over time client will remember this, and so we can build it. Now that's still how you solve it if you are, you know, mathematically trained engineer type like myself. And we have been trying to do over the last few years, especially since Jim has joined us and lead this effort, is to get closer to you all and learn more about you and understand your workflow and bring us closer to how you want to solve your problem. And that's rooted in, both a human desire to connect to you directly as individual to individual. By the way, one of our answer to what will really matter in this post- AGI, post-AI world is the relationship we have with you is actually going to become much more valuable and important. So we're actively trying to build that and grow that closer. But also, that gives us the understanding of how we can be more helpful. The topics we cover today, the fact that Alfred and I are on this stage talking to you about these topics is not because those are the topics we want to talk about. It's because those are the topics that you wanted to talk to us about the most over the last 12 months of experience and hundreds of individual client meetings we have made around the world, and we continue to have

those conversations while you are here. I'm sure those conversations will get to yet another gear after this conversation as well. So, will, where will tech lead us forward? Our tech, our technology will become more visible to you. Our technology will be more intimately integrated with your workflow and how you want us to trade. Right? How is it that the firm that drive, you know, 35 to 40% of retail volume, that transformed the retail trading experience from, largely, you got to walk into a place, talk to a broker, and then that broker talk to a trader and then the trader called it down to the floor and the floor blah blah blah and do all of that. How ... How is it that the firm that has worked to automate away most of that workflow has just launched a high-touch equity business? In a way, that's not surprising at all. That's our effort of bringing our technological capability closer to you. Help us understand how we can help you more, and we will both try to solve that. And maybe we'll also come up with something you haven't even asked before and bring that to you as well. That's what's in our technological-driven, but very human, future.

Maurone: OK. So on the topic of questions that we hear from our client, there's the topic of talent. So there are many careers in this room. There are many people in this room who are responsible for the careers of their teams and navigating their businesses through the changes we are talking about in the markets, whether they're AI or not. So, starting with Alfred, what role should leaders among our clients play? On the one hand, you have AI cheerleader. On the other hand, you have AI business -value skeptic who's saying, you know, only do these things that create value. And I'm going to help make sure that's the case. How do how do leaders walk the line? What is the impact there?

Lin: I don't think that's an easy question. And I think that you have to do something that's consistent with your firm as well as your leadership style and the intersection of those two things. But if I were leaving college today, I would only work for a firm that was going to help my career in the world of AI. And so maybe think about it that way. If I were at mid-career, I would think about it a little differently, like, how does my job change with the world of AI? And if you're a senior or your job is to manage the the spectrum in between and so I, you know, generally have sort of seen the sort of adoption from small company to large company, and they're adopted very, very differently. So if you're a regulated company and your employee is using ChatGPT on the side and they're sending it to your company email, that might be a problem. So instead of letting that happen, you should just, allow, figure out how to get ChatGPT into your company because it does make their- Why are they doing that? It makes their job easier. I mean, I think the the notion that you can't use this, but it makes their job easier is it's like counter to productivity. If you just think of AI as any other technology and it's just a tool, and your employees feel like it's making them productive, you know,

there's a limit to how much you'd be willing to pay. But you guys have very profitable businesses, you should be willing to pay for more productivity and allow them to use that. And then, you know, sort of if you allow that to happen, the next step, I would say, is to think about how to use things that that we know work very, very well for programming, for example. I think if you heard Jensen say that the whole company uses coding tools. He named one company. When I was at his office, I asked him what coding agents would you use. He says, "I provide every single one of them for every single employee, depending on whatever they want to use, because it's so important for us that our employees are literate in engineering, on what the latest is happening." And so I would just encourage all of you to think about, if you have engineers, allow them to use the coding agents. And then, specifically on transformation of AI, I think you just think about things that just doesn't need to be done with a human anymore. Like a lot of search and summarization doesn't need to be done by a human. A lot of firms that are on the bleeding edge with machine learning probably have filled out their compliance work with, not a quote-unquote agent, but software that makes their compliance work and workflow much more efficient. Now, you can probably program an agent to do your compliance work. There are a lot of forms that can be filled out very, very efficiently. And I think the one of the major adopters in AI agents has been in the healthcare system because there's so much paperwork that a human doesn't have to be involved in the middle of that. So.

Zhao: Well, for the record, you know, we don't let everyone use whatever AI tool they want to use. Why don't you? We take a very different approach.

Lin: I'm not suggesting you do what Jensen does. Yeah, of course. Because there's an element of standardizing on something that makes it a lot more efficient. So there's ... go ahead.

Zhao: No. Absolutely, absolutely. I mean, we think a lot, we spend a lot of time thinking about: What are our key workflows? How do humans fit into that? And what is part of that? The automation of that is on us. And what is the part that we can just wait until these agents just get better and better? That's what we spend a lot of time on. And we're a bunch of very technical control freaks. So we try to pick the winners and make sure we pick the right ones all the time. And, uh, happy to share our experiences. But, every firm obviously should figure out what their strategy is, explicitly, one way or another. Yeah.

Maurone: Yeah. Do you think, Peng, I mean, one thing I'd zoom in here. So, one of the things that Citadel Securities has built has been a world, A world-leading quantitative research organization. Right? And that organization is built almost entirely from statistics students to join us from the beginning of their career and grow into future

finance market leaders. Like, how does this change that apprenticeship and that growth? Do you worry about learning gaps for those people?

Zhao: I mean, I think the the work would be less tedious and more fun. You know, it's interesting. You you look at what the AI algorithms can do today. They are now able to win gold medal at the International Math Olympiad. Right? Scoring very high at the math competition here in the United States. But if you think about that kind of task, and I was describing math in this trivialized way earlier. Hopefully, you know, other math majors don't get offended. I mean, to prove a lot of this stuff, you start with a bunch of symbols that's arranged in one order, and you're given a target, a different arrangement in a different order, and you're given, you'll learn a bunch of rules that, upon which, you're allowed to rearrange them. And you're trying to, you're basically saying, "Here's the amount of time you have. You're starting with this ordering, and you want to end up with this ordering, and here are the rules. Go!" When you describe it that way, which is, by the way, the majority of theoretical math, Um, that's something, it's not that crazy to think that a computer algorithm that understands rules, that can very efficiently traverse through various different logical branching of trees, can efficiently find the answer faster than humans can. Right? The stuff we have learned, what we call in science, are various different, intuitive pattern- recognition shortcuts so that we can jump across trees. AI does a little bit of that, and AI's just a lot faster to go through much bigger trees. What the AI is not doing is knowing what's the right question to ask. What is that target? What should you start with? And this real-world problem you have, which is way more complicated than to, arrangement of characters and being able to say, "Hey, this problem we're trying to solve is really just the following." That's hard. Less concrete. But really fun. OK. So what it will change, will continue to change, it has changed, is the mental mechanics and the ability to just like do the manipulation really quickly. That's not as important or as valuable as it has been in the past. You know, for a while, being able to do computation very quickly in your head, you know, was valuable. I mean, that's not been the case for quite a few decades, right? I mean, I bet you, you know, if I go to our, you know, quant engineering organizations, you will find some people who can do some ridiculous amount of mental computations because they do that for fun. But that's not because that's required in their job. And we're certainly not bottlenecked by our people's ability to do mental computation. And similarly, we're going through and, going through the, transformation that we're no longer bottlenecked on our researchers' ability to wrench characters in their head, to go from one sector to another. Where we are bottleneck, is people's ability to conceptually problem-solve, to know what is the right question to ask. But then, once they know what's the right question to ask, they have much more powerful tools today than they had even just a year or two ago in trying to answer those questions. And I think there's parallel of that everywhere else as well.

Lin: I have a story behind what Peng just said. My father was an abacus champion in Taiwan, and he was hired by a bank because they kept the ledgers. And he was able to keep the ledgers in his, both in his head and do the calculations very, very quickly and check. But you know what he did when he, you know, finished college? He wanted to study computer science because he knew that that skill was no longer going to be useful because the machine was going to do all the calculations. But it didn't prevent ... it didn't ... once that was taken away, and he was VP of accounting, he then thought about other ways to make the bank more money. And so I don't think critical thinking is going to go out of style is maybe the explanation that Peng just said. Just because you can do math better, whether it's computation or solving Putnam problems, it doesn't mean that that problem that you solved is the right problem to solve. And the world gets more and more complex. And back to my favorite line about how every problem has a solution, but every solution creates new problems. We will go on to have to solve new problems in the world and find new ways of generating alpha, or making our clients money or building new technology because the technology needs to advance further. And so I'm not an AI, like, I'm an AI optimist, but it's not like all of our jobs are going to get automated away. Some jobs will get automated away. Some people will move to other jobs. Now, when I left, when I dropped out because I didn't finish like Peng in 1997 and it was primetime of the internet, I thought that Amazon was going to kill Walmart. And is Amazon a better investment than Walmart? Sure. But Walmart is 20 times bigger today than it was in 1997, and they were a slightly late adopter to e-commerce. They're still successful, but you do have to absorb new technology. The companies, the retailers that did not adopt, the internet, they have a much, much harder time to exist today. But you know, the thing about technology is you can be a slightly late adopter, and it will not kill you. One final example. Yeah. Apple, which is one of the most valuable companies in the world, was always a late adopter to these technologies. They were not the ones that created the PC. They were not the ones that created the user interface. They were not the ones that created the first mobile phone. I mean, I just think it's interesting that they were able to sort of wait for the right moment and have a unique insight. Almost all of their unique insight is their core value, which is design. Their products are just designed differently and better than other than the others around, and people adopted their product because of that.

Zhao: Well, on that note, thank you very much, Alfred, for being here with us and, for all your insight, both privately and now sharing it with our clients and partners as well.

Lin: Thank you for having me. That's a lot of fun. Thank you.

Maurone: Thank you.