

Josh Dorsey Follow

3x time founder with my wife. Focused on VR/AR & HW for Silicon Valley Bank. Me = family, Frosted Flakes, pizza, tech & Manchester United. Nov 15 • 12 min read

Investing in frontier technology: People, passion and purpose



Bilal Zuberi, Partner at Lux Capital

Placing the right bets on cutting-edge technology is not just about tech; it's also about the people.

"The key is to keep company with people who uplift you, whose presence calls forth your best."

— Epictetus

When financing early-stage technology companies, the Frontier Tech team at Silicon Valley Bank places a lot of weight on the quality and character of our financial partners, namely the entrepreneurs and venture capitalists who are responsible for guiding the company through its growth, from infancy to IPO and beyond. When we find a financial partner with integrity and character, we take pride in working with them to deliver the best outcomes for everyone involved in the company's growth.

Case in point: Bilal Zuberi, PhD, partner of the deep-tech-focused VC firm Lux Capital. Born in Pakistan and having lived in Ohio, Massachusetts and now Silicon Valley, Bilal is a true citizen of the world and someone for whom I have immense admiration, not only as an investor but as a person. I had a wideranging conversation with Bilal that covers his investment approach and how he works with founders—but also about his personal journey and more. What I love about Bilal is his brutal authenticity. He cares a lot about what could be viewed as controversial topics, but that is part of his superpower in building genuine relationships. For a glimpse into Bilal's world, check out his <u>Twitter</u> feed; you can learn about the companies he's invested in <u>here</u>.

Bilal's investments are broad and impressive; they include a company building a frictionless native security system that doesn't protrude into environments, as well as a company building unmanned drones that use data to address climate change.

Josh: The Frontier Tech practice at SVB has been around for about three years now. When building our practice, we looked closely at how Lux modeled *its* practice and thought about the problems Lux's portfolio companies are solving. With that in mind, I'd like to hear a bit about Lux's investment perspective. What is Lux's thesis as a firm, and why did you make this bet on the deep-tech space?

Bilal: Lux was started around 2001 in New York City by two young guys who had a passion and a dream, which was that we should be helping build startups that are solving real-world problems. We believe that many of these problems can be solved using advances in science and engineering, many of which are coming out of universities like MIT, Stanford, Berkeley and Cornell.

Our bet was that all sectors of the economy will go through transformations that will require fundamental innovations in science and engineering—ones that an e-commerce platform or search engine cannot solve for. We believe now more than ever that fundamental changes will occur more rapidly and across sectors—all the way from molecule and drug discovery and healthcare delivery to robotics, satellites, drones, machine learning and artificial intelligence, AR [augmented reality] and VR [virtual reality] and all of those things that we hear about in Silicon Valley. These are all fundamental disruptions in technologies that are, and will continue, affecting major industries. That is our bet, and I think we are seeing in our own lives how the world is rapidly moving in that direction.

Can you tell me about your personal journey? Something you mentioned that was important to you is what you described as the "immigrant mindset." Can you talk about what you mean by that and why it is so valuable to you?

I'm sure all of you living in the startup community day in and day out see a lot of immigrants creating startups. A large majority of the startups have immigrant co-founders, so this question comes up a lot. Why? Are they smarter? Are they daredevils? What's the story? I've been thinking about that myself: Why did I go into startups? Why do I see a lot of immigrant entrepreneurs in our own portfolio?

I don't think there is a grand theory, but I really do believe that a lot of immigrants have a story similar to mine—or probably even more impressive —in terms of their humble beginnings. I've now been here 23 years, and I think sometimes people who are born here can underestimate what this country has done for immigrants. I think a lot of the immigrants who come from far-off places didn't have nearly as many opportunities, and many of them come to this country knowing that they got a lucky draw. Still, today in my home country of Pakistan, most people do not have electricity for 12 hours a day, and they sit there in 110-degree weather with no power and no fan. When I see that, I realize how much opportunity I've been given by coming to this country.

I think one driver of this mindset is the idea that we should build a legacy. We should leave something behind that's bigger than us. Whether or not I succeed, I think that I should at least try to do something that's bigger than just my little self because I got lucky. There are 180 million people in Pakistan, and I'm sure many more around the world who are just as smart as I am, just as qualified as I am, have the same kind of DNA, the same kind of backgrounds. I think at that point I realized that I have to do something big to prove to myself, even more so than to anybody else, that I deserve the success I've had in life. That feeling drives people to say, "I have to do something. I have to build something more than normal. I have to do something that is special."

One of the things I strive for is building real relationships with entrepreneurs and CEOs, and I think a lot of people believe that when building real relationships you want to be as authentic as you can—but showing your authentic self is not always easy to do. How do you get over the fear of being authentic—of showing your views—and how do you approach building those relationships?

You and I are both in the people business, right? We're selling ourselves, and we're selling all the assets we have: the money, the benefits we bring, the relationships we bring, the network we have and so on. But the important thing to remember is that all of us crave genuine relationships, whoever it's with. When you meet an entrepreneur—as I'm sure you have—sometimes they can be really vulnerable. They're taking the most precious thing they have—their time—and they're investing that into this passion that they have, that they think they can change the world, and they're looking for a partner they can really trust. When somebody can reach out to them, and instead of saying, "I've got this covered; I've got you covered; I'll take care of it all," they instead say, "I understand where you're coming from, and I understand what you're trying to do and I want to be able to help. Here are the things that I can do for you"—that sounds far more honest. Being open about what you bring to the table is the most important thing.

I also think you have to be honest with yourself. You have to be who you are. The best people I know are not always the smartest people or the richest people. They're the people who what you see is what you get. When I work with people, they know that I'm telling them the truth that's in my heart.

When it comes to investing in companies on the frontier of science and technology, do you think the space is beginning to go mainstream? If so, how do you maintain your competitive advantage at Lux? How do you make sure that you don't get caught up in the mainstream of what's overfunded?

This is not a sector we are approaching just because we see financial potential here. This is who we are. We're nerdy. We're geeky. Our friends are nerdy and geeky. We read nerdy, geeky magazines. We find our competitive advantage by naturally surrounding ourselves in the company of people from whom interesting and creative ideas are constantly bubbling up. It's a little bit like being an artist: You have to be in a colony of people who are creative. You have to immerse yourself in the company of others who spark your creativity.

Another area where I think we're able to find an advantage is by building an ecosystem around us to help us evaluate opportunities. We're not scared of taking technical risks. We have companies that really seem like total science fiction, and we invest in them because we have a strong network that allows us to evaluate them from an unbiased standpoint. You have to be able to evaluate opportunities in frontier tech with the right lens, so creating an ecosystem and a network that allow us to vet these ideas has helped us enormously.

I think where Lux can be especially helpful is with our network. By investing in 150 or so deep-tech companies over the past 17 years, we've built the muscle memory and the capabilities to be able to help these companies scale. We believe that our competitive advantage is being able to guide a company through all of these challenges because we have done it before.

I know that you have several portfolio companies outside Silicon Valley. How do you think about diversity in founders, diversity in geography? How do you think about those criteria when you're deciding whether to make an investment?

We love diversity because we've realized that that is our strength: People like me can come to this country and be here and be talking to you guys. The biggest strength that the U.S. has—that China doesn't have, Europe doesn't have, Japan doesn't have and India doesn't have—is that we allow others to come in, and we make them a part of us. Our idea of being American becomes a little bit different, a little bit bigger, a little bit more expansive, a little bit more inclusive, but it remains American. We aspire to be bigger and better than who we are, and I think that's really special.

I think for Silicon Valley, this is absolutely our strength. The best of the best come here. I built my career in Boston, and I moved here five years ago because I realized that I'm not investing in the average; I'm investing in the outliers, and the outliers are coming here. They want to be among other people who are just as smart, just as ambitious, who really want to change the paradigm, and this is really important.

But even beyond that, we don't have to invest just in Silicon Valley. Especially in deep tech, if you think about robotics, for example, Boston is absolutely the mecca for robotics, not Silicon Valley. If you're thinking about aviation, we don't even allow helicopters to land anywhere in San Francisco. These innovations are happening globally, so we have to be able to think outside our bubble. We have to be open to that, and we have to bring our strengths to them. We have to be open to the fact that there's amazing innovation happening elsewhere, and there are a lot of dreams and ambitions bottled up in people who are living in other parts of the country.

How much do you rely on fundamental scientific research for identifying new trends? It seems like there has been somewhat of a crisis of credibility in the scientific community over the past few years. How do you assess opportunities in that context as you're looking at these deeptech companies?

We actually help start a lot of companies from the ground up. They could be in biotech, healthcare or fundamental sciences, which means we do a lot of

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The more sophisticated the science gets, instead of glossing over it because we can't be bothered, this is exactly when we take a pause and do our research. In some ways, I think when Lux invests in a deep-tech science-based project, it's a little bit of a seal of approval that other investors see, so we take that role pretty seriously.

Another thing is that the network we've built is not just a network of professors whom we met in a cafe. Our network includes the CEOs of our own organizations. All of our portfolio companies have really incredible technical talent inside, including many PhDs. Many of them have scientific advisory boards and professors who left academia to join our companies, so we really do stay in touch with them. The people we bring in from the outside for our diligence process are people not only who are experts in their field but who actually know us too. They're not just doing something for the sake of it. There's a friend-to-friend communication where we can frankly ask, "Is this real? What are the real challenges here?" We're lucky in that we have a strong network of people with very strong scientific backgrounds who will give us

straight answers to those questions.

When you're working with entrepreneurs who may have more of a technical background, how do you coach them into becoming more of a CEO rather than a product person? At what point do you realize that they may not be able to do that, and how do you work with them?

First, you have to realize that entrepreneurs didn't necessarily start their business to work with somebody else. The entrepreneur's mindset is often *This is my business; this is my company*. As soon as they approach you and they try to raise money, the first thing you help them understand is that it is no longer "my company"; it is "our company." Yes, the founder may own a lot of it, but now you have other stakeholders. It is their company, too. Helping entrepreneurs make that transition from "my" to "our" is the first step. I think if you find that an entrepreneur is not in that zone, it is very difficult for us to work with them. It's really important that that fundamental understanding be there.

The second thing is that you have to invest in their coaching. A lot of people don't make that investment because it takes a lot of time. That's why when I take board seats, I take the role very seriously. When I was a young VC, it was like, *Whoa! I want a board seat*. Now I'm like, *I don't want a board seat*. Because the minute you take a board seat, a lot of problems come at you that you have to deal with. It could be that co-founders are fighting, or some investor is being a jerk or some employee is going to leave and sue the company, and all of this becomes *your* problem and *you* have to help solve it. So I think playing that role of a fiduciary and playing the role of an advisor is really important.

Another aspect is that, with few exceptions, you find many people who either don't grow into a scalable CEO role when the company is scaling fast, or they don't want to be in the role of CEO anymore. They may take the CEO title, they may like the idea of keeping the CEO title, but they don't want to do what a CEO does. For a post-seeded company, CEOs don't build product. They're recruiting, they're marketing and they're fundraising. A lot of CEOs, especially highly technical CEOs, really don't like those jobs. Their safe zone is to get into the product and start messing around with the product guys. The point here is to make space for the CEO to work where he works best, and then come up with a solid transition plan.

The last thing is that it's really important to have empathy as a human being when these transitions happen. These are people whose lives are going through a lot of changes, and sometimes those changes are not always pleasant, so you have to be there for them. There are many times when founders leave startups, and at that point they're not really happy with the CEO, they're not really happy with the other founders, but we play the role of saying, "You know, we will back you. We will back you again because you were critical to the founding of this company; you understand what it takes at the zero-to-one stage, and we will back you again." We have to be available for that, and I think it often helps the CEO through that transition, and it helps us as a firm build strong relationships based on trust and transparency.

Thank you so much for your time, Bilal.

Thank y	ou, Josh, it	was a pleasur	e.					
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