'BEHIND THE MARKETS' PODCAST: ALL ABOUT ARTIFICIAL INTELLIGENCE

Christopher Gannatti – Global Head of Research, WisdomTree.
06 Apr 2023

On the 10 March 2023 episode of the Behind the Markets podcast, we had the pleasure of speaking with Blake Heimann, Senior Associate, Quantitative Research at WisdomTree. Within our team, we spend a lot of time talking about artificial intelligence (AI) with Blake, especially lately. Years ago, he was bitten by the bug, gaining a passion to study such things as statistical methods, regressions and time series forecasting. He's even pursuing a Masters degree presently, focused on AI and machine learning.

With the release of ChatGPT from OpenAI in the latter part of 2022, AI entered into the public's consciousness in a manner reminiscent of some of the world's most successful applications—such as TikTok and Instagram. We wanted to have this conversation in order to provide perspective on AI and help people in thinking about the space itself as well as avenues of potential investment research. Some of the topics we covered included:

ChatGPT

It's difficult to say how long we'll be focused on ChatGPT or the value that it may bring, but it speaks to how AI is a space subject to nonlinear advances. A lot of work and investment went into creating ChatGPT, and then it represented something very tangible for any person to see and experience. We have to remind ourselves that next year we may be talking about something entirely different and even more capable, but we also admit that competing with ChatGPT purely on the basis of 'viral adoption' would be quite a feat.

Graphics processing units (GPUs) and the discussion of Nvidia vs Intel

Within semiconductors, Nvidia has had an excellent run, almost branding itself as the company most capable of designing the best semiconductors upon which to train AI models. Intel, on the other hand, has stumbled on some of its more cutting-edge hardware releases and has even had to cut its dividend recently. We were able to talk to Blake about how to consider the differences between these companies in the present market environment.

Ambarella for computer vision chips

We didn't want to fall into the trap of only discussing some of the largest and most recognisable semiconductor firms, so we asked Blake if there were any semiconductor companies out there that he, as someone more deeply involved in AI and machine learning, is excited about. He did not hesitate and noted Ambarella. Ambarella is designing

specific chips that are involved in computer vision, specifically as it relates to autonomous driving, and Blake went into a discussion about image segmentation and how these chips are getting better and better at performing these rather involved calculations directly, in almost real-time.

Proliferation of data and opportunities for AI disruption

The biggest reason, in our opinion, that we are discussing things like ChatGPT and autonomous driving, is that we have recently gotten to a place globally where we are generating more data than ever before. We asked Blake, with the proliferation of this data, what industries he believes are most ripe to be disrupted in terms of AI providing something powerful in a faster, more efficient way. Blake noted that this can happen in many industries, but then he did settle on the concept of using AI for drug discovery— namely how models can suggest potential compounds and molecules that can have the potential to react in a beneficial way to help with therapeutics. While AI may not directly create drugs end-to-end, it may suggest interesting paths for researchers to try and cut down the overall time from concept to finished drug.

Conclusion: always look at the direct functional expertise for any AI company

There is a big difference between a company that mentioned AI a few times on a recent earnings call, versus a company that is directly providing AI as a solution to real, current-day problems. Blake noted in numerous ways the importance of always being able to see the specific AI function being performed by a given AI company in order to help judge is potential attractiveness as an investment.

To hear this conversation, click here or visit Behind the Markets on any podcast player.

Related blogs

+ What is ChatGPT and why is AI suddenly a big deal?

View the online version of this article here.

Important Information