

Weekly Commentary

You're Already Heavily Invested in Al

The continued growth and excitement around artificial intelligence (and, let's be honest, the eye-popping stock returns for related companies) has resulted in a number of questions from investors asking how to gain exposure to the space. Frankly, it's the closest thing to a fervor that we've seen since the crypto/NFT craze of late 2021, but our view on AI and large language models (LLMs) is very different from our view on bitcoin, cyberpunks, and even the blockchain.

I've been hearing about uses for the blockchain, most of which are more easily accomplished with different technologies, for a decade. I have yet to use blockchain, Bitcoin, or an NFT for anything important. I'd assume the same is true for virtually every reader of this commentary.

On the other hand, ChatGPT was launched about one year ago, and I use it every day. At \$20 per month, it is the most cost-efficient junior research analyst (as entirely distinct from the best) I've ever worked with, and I've worked with hundreds of junior analysts in my career.

ChatGPT is a specific type of LLM that uses a substantial amount of information and predictive language to interact in conversational English. As I expressed during one of our recent Livestreams, if you haven't explored ChatGPT or a competitor LLM, then I highly encourage you to do so.

In fact, "How should I invest in AI and LLMs?" seems like a perfect question for ChatGPT. Why not go straight to the source? This is the unedited response:

Investing in the growth of artificial intelligence (AI) and large language models (LLMs) presents a broad spectrum of opportunities, from direct equity investments in leading technology companies to venture capital, ETFs, and other financial instruments. Here are several key strategies and considerations:

1. Direct Equity Investments

Tech Giants: Investing in stocks of leading technology companies that are at the forefront of AI and LLM development, such as Google (Alphabet), Microsoft, Amazon, and NVIDIA, can provide direct exposure to the growth in this sector.

Emerging Players: Look for emerging companies with a strong focus on AI and LLM technologies. These can offer higher growth potential but come with higher risk.

2. Venture Capital and Private Equity

Start-Up Investments: For clients with access to private investing, consider venture capital firms or funds that specialize in AI and LLM startups. This is riskier but can offer significant returns if these startups succeed.



Growth Equity: Invest in later-stage private companies with proven business models and strong growth prospects in the AI field.

3. Exchange-Traded Funds (ETFs) and Mutual Funds

Al-Themed ETFs: There are ETFs that specifically focus on Al and technology innovation, offering diversified exposure across many companies involved in Al.

Sector Funds: Invest in sector-specific funds that have a high concentration of Al-oriented businesses.

4. Research and Development Partnerships

Corporate Bonds and Investments: Consider investing in corporate bonds or special investment vehicles that fund AI research and development. This can be a way to support and benefit from AI innovations indirectly.

5. Intellectual Property and Licensing

Patent-Focused Investments: Some companies or funds focus on acquiring patents related to AI and LLMs. These can be speculative but offer a unique angle on the technology growth.

6. International Opportunities

Global Market Exposure: Al development is not limited to the U.S. Explore investments in international companies and markets, such as China's Baidu or Europe's Al startups, to diversify and capture global growth.

7. Ethical and Sustainable Investing

ESG Considerations: With increasing focus on ethical AI, consider the environmental, social, and governance (ESG) aspects of AI investments. Companies with strong ESG practices may be better positioned for long-term success.

Human intelligence (if there is such a thing) is back writing now. Let's decompose ChatGPT's advice a bit.

1. Large tech firms and emergent players

Makes sense, but it's worth noting that technology is already 40% (!) of the US large cap stock market. If we narrow the selection criteria to the companies that appear in Al-themed ETFs, approximately 20-25% of a globally diversified equity portfolio is already concentrated in Al-related companies.

2. Venture capital and growth equity



Also makes sense. I can't name them here for compliance reasons, but multiple venture capital managers in our 2022 Private Equity fund are all-in on AI. We will also commit to additional funds that are focused on the space in our 2024 vintage year fund.

3. Thematic ETFs and Mutual Funds

Less convincing, as this is just doubling down (with much higher fees) on positions that are already the largest part of an indexed equity portfolio.

4. Corporate bonds

Even less convincing. I'm not going out on a limb by suggesting that investors asking about AI want the upside inherent in equity ownership, not bond interest.

5. Intellectual property and licensing

Fine in theory, but who's selling promising AI patents at a reasonable price right now? You own these by owning the tech and venture capital companies.

6. International opportunities

Ok, but if you're a promising non-US technology firm that's posed to have an impact in AI, why would you list on any exchange but the Nasdaq?

7. ESG

What? I feel like ChatGPT might have been programmed to include this with every investment question by its corporate overlords.

In sum, it's likely you already have a lot of your portfolio riding on the success of AI.

We believe two Al-related areas of investment are worth considering, and ChatGPT completely missed them: digital infrastructure and energy-related infrastructure. This is a topic for another commentary, but LLMs require substantial amounts of energy and computational power – a trend that will collide headfirst over the next decade with the forecasted shift toward renewables and the resultant increased instability in our base energy supply. We made a commitment to an energy-related infrastructure fund in our 2022 vintage PE fund, have digital infrastructure debt exposure as part of our private debt strategy, and we expect to add additional exposure in these areas over the balance of 2024.

Finally, just for fun, here's an AI-generated image that shows "someone investing in LLMs and AI." I'm sure a real artist would look at this and critique it, but it's not bad for 10 seconds of work.



Our values appreciate yours



Source: DALL·E

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