How 9 hedge funds including Bridgewater, Millennium and AQR are thinking about AI — and the 11 experts leading the charge

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- **Hedge funds have been on an AI hiring tear as firms look to solidify their teams and strategies.**

- **Wall Street aims to use AI to boost productivity and performance and cut costs.**

- **Business Insider takes you inside the booming world of AI at the country's biggest hedge funds.**

BRIDGEWATER ASSOCIATES

Bridgewater Associates' Jasjeet Sekhon, chief scientist and head of the AIA Labs and Greg Jensen, co-chief investment officer.

Talent wars are alive and well in the hedge-fund sphere as some of the country's biggest funds build out their AI teams.

Artificial intelligence is the technology du jour on Wall Street. Some firms are using it to help junior bankers analyze documents to prep for a big client meeting, while others are letting machines take over the investment process.

And while Wall Street is no stranger to AI and machine learning, recent advances in generative AI have opened up new possibilities. It's still early days, but hedge funds are investing in AI research, human capital, and technology to harness AI's potential and find an investing edge.

That's led hedge funds to poach tech talent from other financial firms and establish teams under some of the top minds in the industry. Millennium Management and ExodusPoint recently hired AI leaders from Bloomberg and Balyasny Asset Management. Meanwhile, funds like Man Group and Balyasny have chartered new teams dedicated to

applying AI across teams.

While many firms opt for a centralized structure, there's no one-size-fits-all approach — Citadel, for instance, doesn't have someone focused exclusively on AI.

Most of these executives are tasked with setting their companies' AI agendas and ensuring that research and tech development progress is shared across the firm. These execs aren't always responsible for building the technology. For some, their role is to influence — or advocate for — its use among internal stakeholders, like portfolio managers, business leaders, and fund founders.

Business Insider identified some of the top leaders behind the trading models, research, and technology infrastructure that could determine the industry's winners and losers. As men tend to dominate the executive ranks in finance and tech, this list is exclusively men. The executives have worked on Wall Street, in Silicon Valley, and the upper echelons of academia.

Here are 11 AI experts to know at some of Wall Street's biggest hedge funds

Bridgewater Associates' Jasjeet Sekhon and Greg Jensen

Investment firms have long tried to use AI to predict the markets. At the world's largest hedge fund, that might soon become a reality.

Bridgewater is building an artificial investor designed to predict events, create investment theories, and make trades with client money. The machine-learning-driven fund is being built and trained in Bridgewater's AIA Labs, short for Artificial Investment Associate, whose mission is to replicate everything the hedge fund does via machine learning, Jensen, the firm's co-chief investment officer, recently told Business Insider.

At the helm of the AIA Labs is Sekhon, the hedge fund's chief scientist. Jensen sought out the machine-learning expert, who's taught at Harvard, Yale, and UC Berkeley, in 2018. Sekhon specializes in causal inference, or the study of causation (versus correlation, for instance), which is at the core of Bridgewater's approach to macro-investing that aims to predict the ripple effects of global and market events.

"In some sense, I feel we've been able to create the bones of something that will be more than the sum of its parts," Jensen said. "We won't describe specifics, but I do expect we will be able to generate a unique source of alpha that is designed to have both high returns and is uncorrelated to markets and other sources of alpha."

AQR Capital Management's Bryan Kelly

When Bryan Kelly was named the hedge fund's head of machine learning in 2019, the creation of his small team signaled that the firm was getting serious about AI. Kelly said that what began as a small effort to apply specialized statistical approaches to financial problems has changed certain aspects of the fund's investment process, like stock selection, over the past five years.

The quantitative hedge fund relies on algorithms and statistical models to make market bets. Much of Kelly's remit is working with research teams across the firm on machine-learning-related projects. Another sizable part is educating skeptical PMs, leaders, and traditionally minded economic researchers at AQR on the brighter side of AI.

"AQR was born out of the academic economics world. So the traditional views and approaches of the economics profession are going to factor very prominently in the way we do research at AQR," Kelly said, adding that that meant being conscious of data-mining risks and biased toward using simpler models with fewer variables.

"Looking back five years at what we've done to push the machine-learning effort along, a big part of it was helping leaders in research at AQR understand the benefits of machine-learning approaches and get comfortable with the possible risks that come along with using them," said Kelly, who joined the AQR in 2018 after initially working with the firm as a consultant in 2016.

Kelly is also a professor of finance at Yale University, where he teaches in both the MBA program and the master's in asset management program, which brings a technical focus to investing and asset management. He also teaches a doctorate-level course on machine learning in finance.

Balyasny Asset Management's Charlie Flanagan

Flanagan was tapped to lead $21 billion Balyasny Asset Management's applied-AI group in November. Flanagan, who spent five years at Google and teaches machine learning and data science at Stanford University, works with portfolio managers and business leaders across the firm to consolidate and advance AI efforts and improve research processes.

Balyasny set up a natural-language-processing team in 2018 (most recently run by Shen Xu, who departed for ExodusPoint in September). But Flanagan's new team is a response to the growing interest from different corners of the Chicago firm that picked up after ChatGPT debuted about a year ago.

Balyasny has tried to empower people on its investment, business, and technology teams to experiment with the tech, such as by automating workflows or finding ways for language models to process documents. Now the firm is looking to scale AI while mitigating duplicative efforts. Flanagan's team should round out to about six people as he continues his hiring push.

Previously, Flanagan was the head of data science for Balyasny's growth-equity desk, which finds investment opportunities in startups likely to go public. That gave Flanagan a look at startups on the cutting edge of AI models and innovation.

"Really, it's just about unlocking a lot of great work that's just being done in those individual verticals and bringing it across the organization," Flanagan told Business Insider.

ExodusPoint Capital Management's Shen Xu

Xu is a relatively fresh face at ExodusPoint, but he's by no means a stranger to Wall Street AI. He joined the $12.6 billion multistrat hedge fund in September, leaving his post as a portfolio manager and head of natural-language processing at Balyasny Asset Management. Before that, he spent nine years at the proprietary trading firm TradeLink.

Based in San Francisco, Xu will be building out Ex-

odusPoint's AI infrastructure, or the hardware and software required to build, test, train, and operate AI apps and services. In a post announcing Xu's hiring, the company said he'd also be part of enhancing ExodusPoint's data-science platform.

ExodusPoint has been bulking up its senior technology ranks. In addition to Xu, the fund hired Peter Cotton as its chief data scientist in October. Cotton, a former JPMorgan executive director who spearheaded data initiatives for the investment business, joined from Intech Investment Management, a small quantitative asset manager in West Palm Beach, Florida.

Man Group's Tim Mace

At the world's largest publicly listed hedge fund, Mace is in charge of a department that launched in October. His team of seven is responsible for AI, machine learning, and data science across the $161 billion hedge fund.

Mace was previously in charge of building out Man's data platform for the fund's investment teams — a seminal piece of technology at a quantitative investment firm where investment prowess comes down to mathematical and computer-based modeling.

Man Group has embraced generative AI — it says about 40% of the organization uses ManGPT, a form of OpenAI's ChatGPT chatbot, and the company's technologists use AI to write code.

Mace said he imagines an office where these separate AI tools are combined to create an "alpha assistant," which could help investors search through reams of data, form an investment theory, and generate code to determine whether it's a viable strategy. While Mace isn't close to realizing such a tool, it offers a glimpse of where the hedge fund's AI ambitions are headed.

Millennium Management's Mike Purewal and Gideon Mann

Izzy Englander's Millennium Management has grown its AI bench strength with a few key recent hires.

In October, the hedge fund hired Mann as the firm's global head of AI. Mann is teaming up with Millennium's chief information officer, Vlad Torgovnik, to build and lead an AI advisory group. He'll collaborate with AI experts and teams across the firm to share knowledge and advise on AI initiatives.

Mann comes to Millennium from Bloomberg, where he was the head of machine-learning products and research, according to his LinkedIn profile. He led a team of 50 product managers, research scientists, and salespeople focused on building AI products. Before that, he worked at Google for six years as a research scientist focusing on machine learning.

The hedge fund also hired Purewal to lead AI for the firm's equities technology division, a group of technologists supporting equities investors. Millennium

snagged Purewal from Bank of America, where he worked for almost 13 years. Most recently, he was the bank's head of markets data science, designing and implementing AI models across equities sales and trading. He also worked with Bank of America's clients with their dataset needs, building an internal data pipeline and an external-facing API for clients to receive data.

Point72's Sridhar Nimmagadda

Nimmagadda leads generative-AI efforts at the $30 billion hedge fund. He's responsible for helping it adopt generative AI, whether that's through researching or building tools.

But AI is just one subset of Nimmagadda's remit. As the head of technology innovation, he's focused on researching and exploring various emerging technologies, including quantum computing and technologies aimed at understanding the brain. He reports to the fund's chief technology officer, Mark Brubaker.

Nimmagadda has worked in finance for his whole career, according to his LinkedIn. Before joining Point72 in 2021, he spent almost 14 years at Millennium Management, where he most recently served as the head of technology research and development. He also worked in senior roles at Merrill Lynch and UBS, and at the Chicago Board Options Exchange as a software engineer early in his career.

Two Sigma's Mike Schuster

Schuster leads a team of AI researchers dedicated to solving some of the toughest machine-learning problems for Two Sigma.

Schuster leads the AI core team, at the heart of the $60 billion fund. As with most quant funds, Two Sigma's various investment portfolios run on AI models built with lots of data, complex engineering systems, and neural networks, a subset of machine learning inspired by the human brain. The team also uses machine learning to analyze hundreds of market variables to make predictions and find opportunities. The fund declined to disclose how many people make up the team.

Before joining Two Sigma in 2018, Schuster worked for 12 years at Google, where he helped lead foundational AI research on the Google Brain team, a group behind some of Google's AI breakthroughs like Google Translate. The company says Schuster is working to bring some of the wins in Silicon Valley to Wall Street. His team is researching AI approaches that have been successful in tech, and could be valuable at Two Sigma to shape its investment decisions.

Vatic Investments' Li Deng

Deng is the chief AI officer and global head of machine learning at Vatic Investments, a quant shop in

New York founded by a former Jump Trading exec. But he's shaped the AI agenda at some of the most successful companies in corporate America.

Today he leads an AI group, part of the firm's quantitative research group, made up of five experts in AI fields such as large language models and deep neural networks. Deng told Business Insider it's one of the fastest-growing business areas, with several pending hires. The team conducts research to develop trading strategies for the high-frequency futures trading and asset-management segments of the business. While the team relies on open-source code, such as Hugging Face, Vatic is focused on building internal tooling and is recruiting AI-infrastructure engineers to build and deploy in-house models.

Deng's 30-year career has taken him to some of the biggest names in tech, finance, and academia. During his 17 years at Microsoft, Deng served as a chief scientist of AI. He also founded the Deep Learning Technology Center, which researched and developed technology in deep learning, a type of AI that trains computers to process data like the human brain. In 2016, the center began operating as an internal Microsoft AI school for software engineers — in its first term, the school attracted over 7,000 applicants, of which only 50 were selected, Deng said.

Then Citadel recruited Deng to become the hedge fund's chief AI officer and head of machine learning. While working for Ken Griffin's hedge fund, Deng built its AI research team in Seattle, which used deep learning to discover alpha, among other tasks, he said. He added that his team worked with discretionary trading teams to improve their productivity with AI tools.

Deng's a researcher at heart — he said that's a reason he left Microsoft for Wall Street. He was a tenured professor at one of Canada's top math universities, as well as at the University of Washington. He has written several books on machine learning and AI and published more than 350 academic papers on the topic, one of which has received about 11,000 academic citations.