

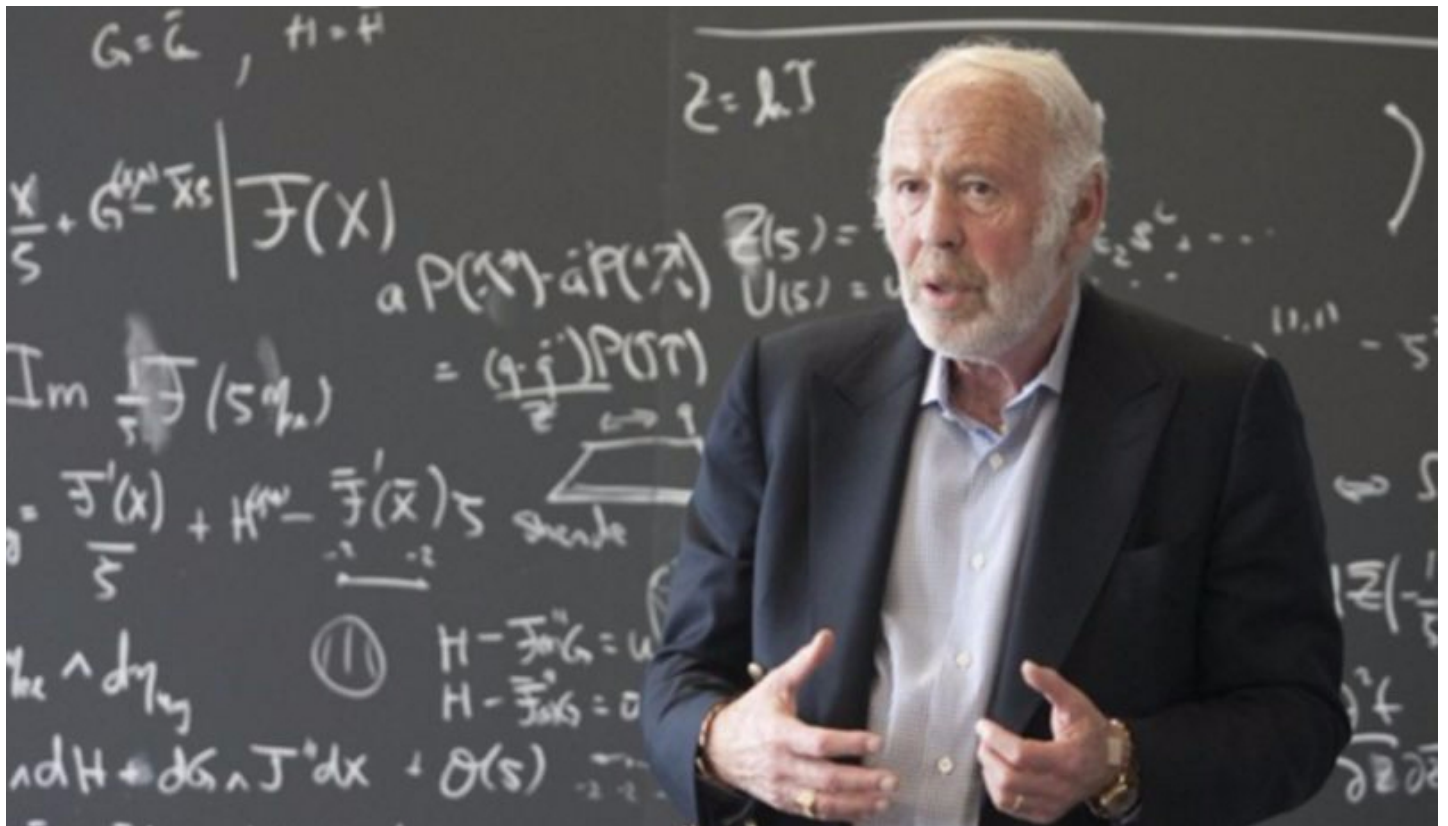
Twitter Thread by Val Katayev

**Val Katayev**[@ValKatayev](#)

A former CIA math genius built a quantitative trading fund that earned more than \$100 BILLION for investors.

At 66% return/yr, his track record destroys that of Warren Buffet, George Soros, Carl Icahn, and every investor who ever lived.

The Smartest Billionaire in Finance:



1/28

If you'd have put \$100 into Jim Simons' Medallion Fund in 1988, it would be \$400M+ today.

By contrast,

\$100 in the S&P 500 in 1988, would be \$2,000 in 2022. (roughly)

Let that sink in.

2/28

Jim Simons's Medallion fund has had unreasonably high annual returns of 66% across 30 years.

For comparison, Buffet clocked in at about 20%/yr.

Many funds don't make that in a lifetime.

3/28

Even during the financial crisis of 2008, it made a net return of 82.38%.

They make so much money for their investors that they charge 44% in management fees.

The industry standard is 20%.

REN TEC

MEDALLION FUND



BEST RETURN YEARS

AtticCapital.com

Year	Gross Return	Fee	Net Return
2008	152.10%	44%	82.38%
2007	136.10%	44%	73.42%
2000	128.10%	20%	98.48%
1994	93.40%	20%	70.72%
2013	88.80%	44%	46.93%
2017	85.40%	44%	45.02%
2006	84.10%	44%	44.30%
1990	77.80%	20%	58.24%
2018	76.40%	44%	39.98%
2014	75.00%	44%	39.20%
2009	74.60%	44%	38.98%
2015	69.30%	44%	36.10%



AtticCapital.com

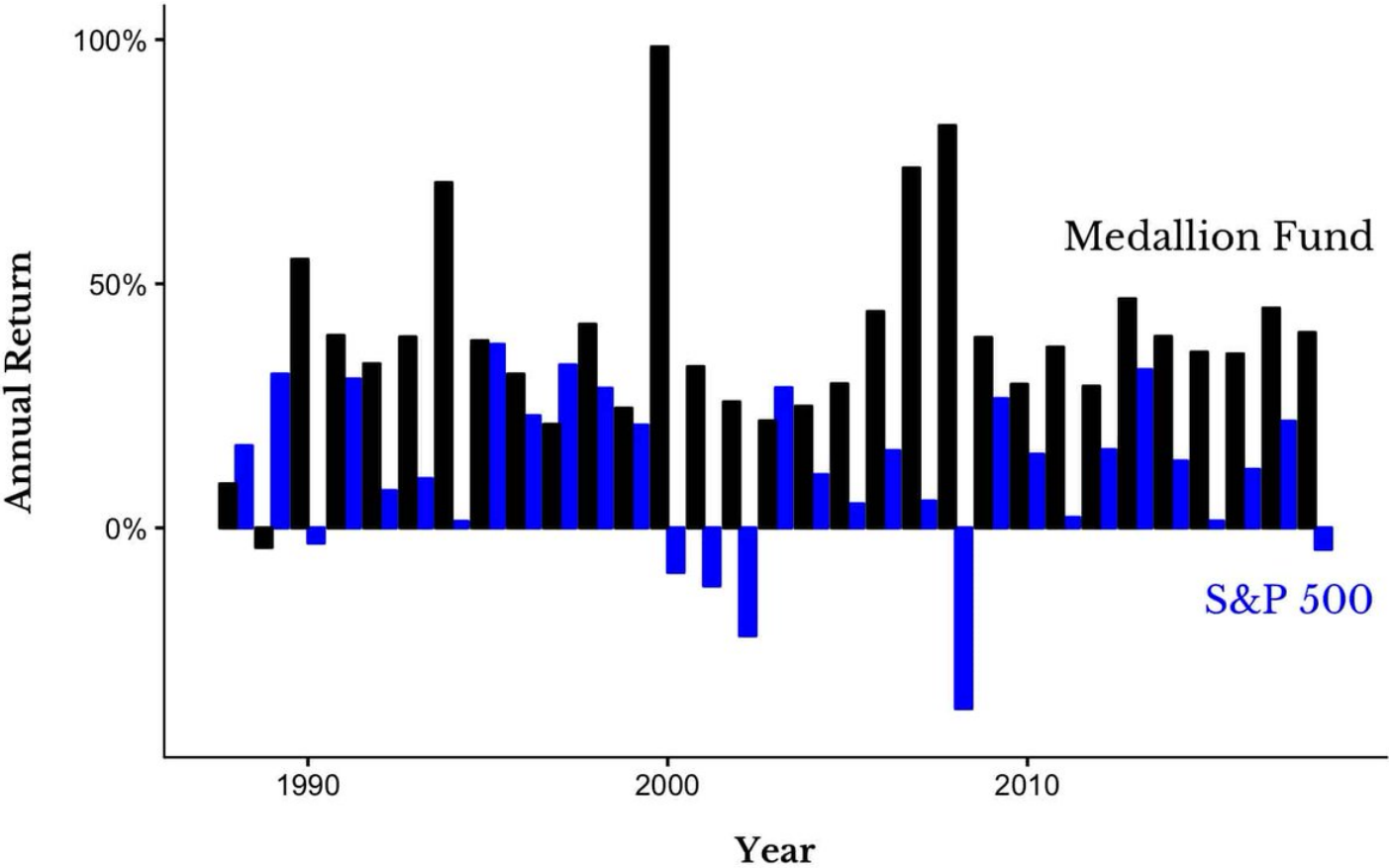
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It uses math calculations to decide the bulk of its trades, & none of the market trends apply to how it performs.

It wins by finding order in chaos.

The fund is managed by Renaissance Technologies, the parent company founded by the mathematical genius Jim Simons.

Annual Returns for the S&P 500 vs. The Medallion Fund (Net of Fees)



Source: DFA, Gregory Zuckerman (OfDollarsAndData.com)
Note: Shows the total annual returns for the S&P 500 and the Medallion Fund (net of fees).

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No one knows how it makes so much money, and their algorithms are one of the world's best-kept secrets.

And the fund is so secretive and exclusive, that no one can invest in it. It closed doors for new investors in 1993.

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The Unsolved Mystery of the Medallion Fund’s Success

Renaissance Technologies’ famous but secretive in-house hedge fund doesn’t move in step with any market trend.

6/28

The fund was getting so big, so fast, he'd swallow Wall Street at that rate of compounding.

However they had to stop allowing new investors, otherwise it was getting too big and it's every trade moves the markets.

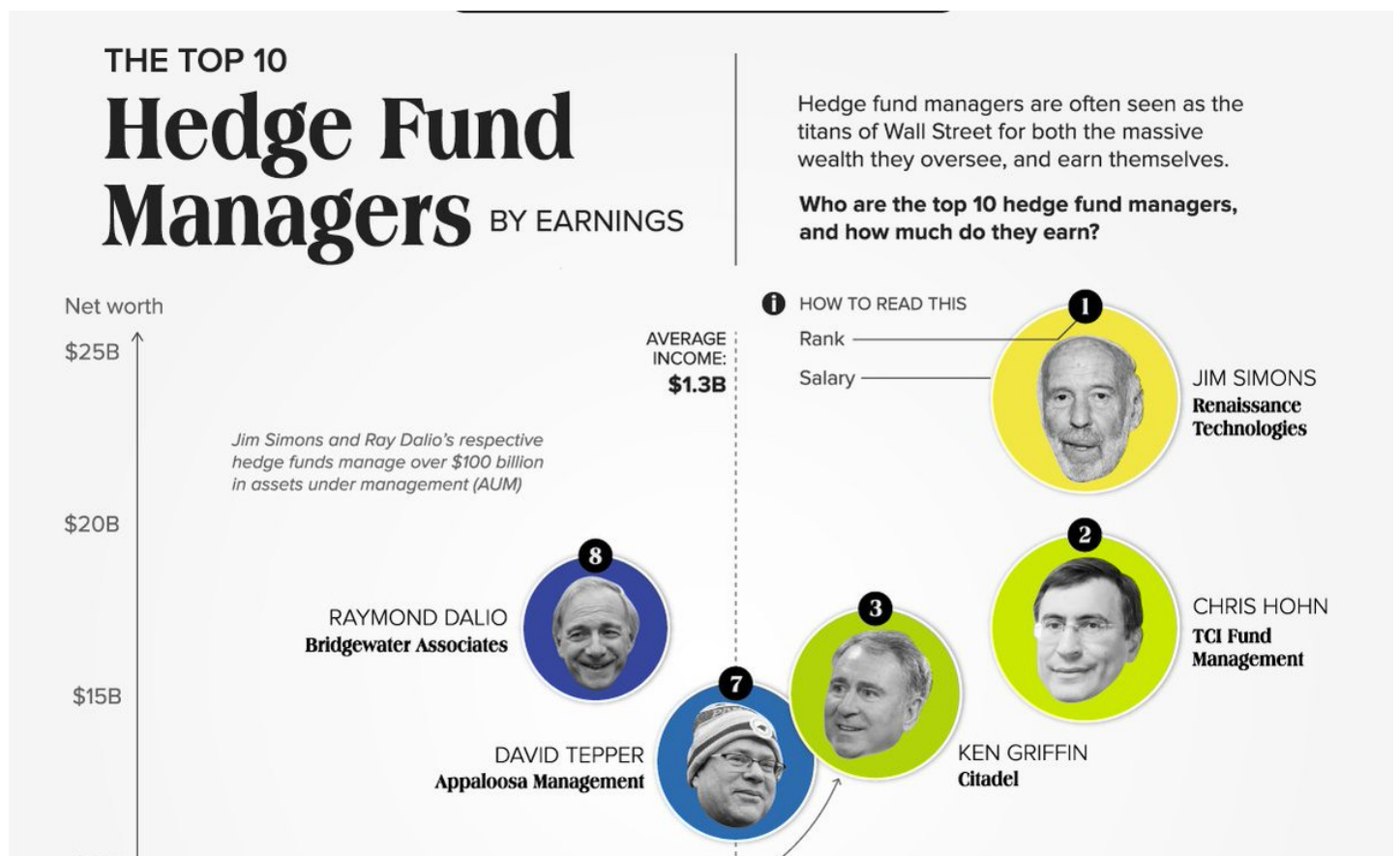
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The real reason behind Medallion Fund's super-real profits is that it's run by the world's best scientists and not traders.

Simon's earliest recruits came from his connections at the CIA and IDA -America's intelligence bureau.

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Jim Simons is known as the greatest of all times.



9/28

For example, during the pandemic, their primary 2 funds open to outside investors had negative returns:

1. RIEF: -22%
2. RIDA: -33%

In contrast, Medallion had +76%

Who is part of it?

The inside renaissance people, including ex/current employees + Simons himself.

10/28

The missing piece, is the story of why Medallion Fund exists, and how Simons changed the stock market by introducing mathematical predictive equations to the world of finance.

Today, most trading companies use AI built on mathematical predictive theories.

11/28

He changed the way stock market functions by building codes inspired by predictive theory.

Today it is the backbone of AI and machine learning. The system exists everywhere: From how world analyses the stock market, to sports performance, Google's algorithm, etc.

12/28

And so how Medallion makes money, in not through some superior understanding of finance, it is pure maths.

13/28

Their moves control the market. Their style seems chaotic & aggressive, but it's carefully calculated by supercomputers, powered by some of the most ingenious codes.

Their success rate is about 50%, & they move millions of dollars in and out of the market, fast.

14/28

No one to date has been able to trace their strategies.

But we know that the code powering the fund includes several million lines, working as a single unit.

They don't follow any market trends, and seem mostly 'random' to everyone, including competing firms.

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Best part? Jim Simons is not even a finance guy.

Before founding Renaissance, Simons worked for the CIA, to help them crack Soviet codes during the Cold War.

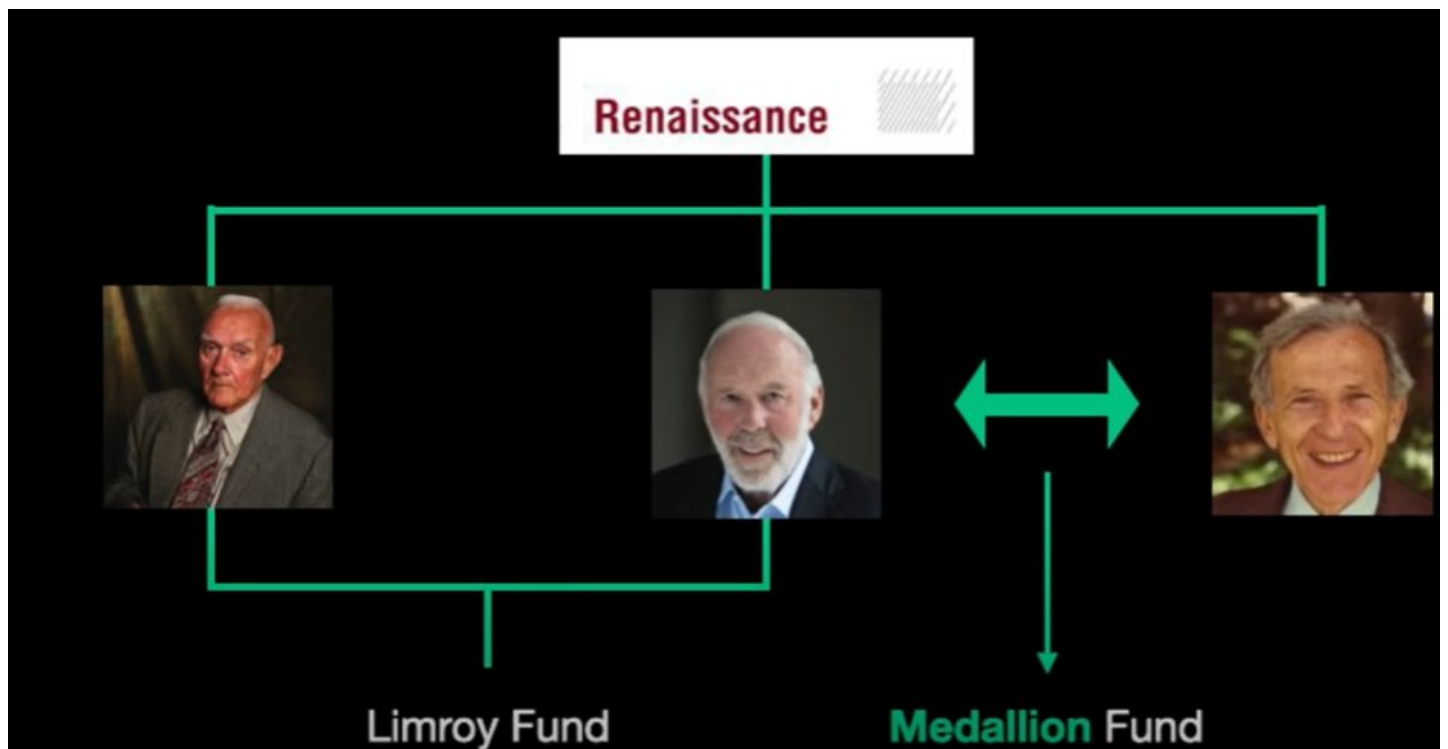
Before Simons' code breaking models, the CIA hadn't cracked Soviet cryptic messages in over a decade.

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The team behind the Medallion Fund, had the smartest mathematicians and scientists of that time.

1. Leonard Baum: Best known for Baum–Welch algorithm & Baum–Sweet sequence.

2. James Ax: Made groundbreaking contributions in algebra and number theory using model theory.



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Together, they built a huge database of stock market pricing behaviour, going all the way back to WW2.

It wasn't easy, because this was the 1980s, and the data wasn't organized by computers yet.

They relied on news, and other traditional fundamentals.

18/28

Simons introduced computers to the stock market.

Him and his team bought hundreds of books from the World Bank (the only place back then with the financial data he needed) and manually fed data to their computers.

19/28

Their goal was simple:

To develop the strongest quantitative algorithm, they needed to study the market's entire history and find 'anomalies' in the market to predict behaviour in places no one looks.

Their computers were the first to create that record

20/28

This gave them access to live market prices that no one else in the hedge fund world knew at that time.

The genius stroke:

Applying Baum's predictive mathematics to the huge pile of data their computers now had. They could predict even the wildest of market fluctuations.

21/28

Some principles they follow:

1. Find a pattern that seems like an anomaly.
2. There's no data like more data.
3. Don't ask why, just follow the prediction.

22/28

It's common practice in the financial market for players to occasionally develop great strategies and sweep the market.

But competing firms quickly trace the methods and eventually kill the strategy.

This has not happened yet at the Medallion Fund.

23/28

Medallion is able to achieve this secrecy, because Renaissance's high-profile hiring is infamous for signing strictly confidential NDAs with employees.



24/28

The team keeps a very low profile, and very little is known about this small group of scientists.

But we know that their vast wealth is greater than the GDP of many countries.

Also, the Medallion money heavily influences US politics. Even today ■

25/28

In 2017, Simons asked Robert Mercer (then his co-chief executive) to step down from his position.

Simons is a democrat, and Mercer spent \$25 million of money earned from Renaissance as the Republican party's biggest contributor, in the 2016 campaign backing Trump.

Robert Mercer: The Billionaire Behind Donald Trump

Updated March 31, 2017



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In the same year, Simons donated a total of \$26M during the 2016 elections, of which \$16 million went to Hillary Clinton.

27/28

Medallion Fund is still outperforming every other fund.

Renaissance faces pitfalls. In 2021 investors yanked \$15B out of its funds that are open to investors.

But Jim Simons printed his money, retired in 2009, and probably collects his Medallion Fund returns ■■■■

28/28

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The Smartest Billionaire in Finance: pic.twitter.com/O5hxoMzjhp

— Val Katayev (@ValKatayev) [January 13, 2023](#)

Sat next table to Jim Simons and [@JoeBiden](#) at a fundraiser some time ago. Then he went up to speak.

Jim's story was so fascinating, I had to write it.



Correction: Jim was a code breaker at NSA, not CIA. Mixed up my alphabet soup.

I started to put up video content on Instagram and TikTok, follow me there.

Links in bio.