

# Deep Deep scores but Tong scores more this round

BY HARRY HUO

The November results for the Battle of the Portfolios are out! We did it again, or rather, our AI machine learning algorithm called Deep Deep has done it again. Deep Deep achieved a 7.61% monthly return in November and a stunning 12.40% return since inception.

We beat Berkshire Hathaway, AVF (our own fund), Dow Jones and MSCI Asia Pacific. Our worthy competitor, Mr Tong's portfolio, rode on the Asian markets' recovery by picking several Asian big cap stocks and bond funds (different asset class), thereby achieving an awesome 13.51% return. Our congratulations to Mr Tong but the game is still afoot.

Our single US stock pick, **Conn's Inc**, achieved a staggering 16.41% monthly return, beating **Berkshire Hathaway's** monthly return of 5.14% by 11.27%. Last month, we beat Warren Buffett's investment vehicle with **Genworth Financial Inc**.

The MSCI All Country World Index gained 9.63% mainly due to 60% of its constituents in US stocks. If we adjust the weights to mirror MSCI ACWI's country weights, our weighted Deep Deep portfolio would have achieved a mind-boggling 15.76%.

Humility requires us to disclose this. We are aware that our AI Deep Deep is a probabilistic machine optimised to pick stocks with the highest returns. Our quant team estimates that there may be three months out of 12 that we would underperform against competing portfolios and the indexes. Here is a simple explanation. The global indexes and Warren Buffett's Berkshire Hathaway are heavily weighted in tech stocks like **TSMC**, **Tencent**, **Google** and **Apple**.

## 15 stock picks for December

Stock	Country	Price (US\$)	% of portfolio
Aurizon Holdings Limited	Australia	2.47	6.62
Canadian Tire Corporation, Limited	Canada	108.66	6.37
Citi Trends, Inc.	United States	30.60	6.65
CL Holdings Inc.	Japan	5.94	6.67
DMCI Holdings, Inc.	Philippines	0.18	6.07
Hutchison Port Holdings Trust	Singapore	0.21	6.65
Mears Group plc	United Kingdom	2.31	6.69
Mercedes-Benz Group AG	Germany	66.98	7.07
Pantech Group Holdings Berhad	Malaysia	0.17	6.99
Pegatron Corporation	Taiwan	2.06	6.88
PT Bukit Asam Tbk	Indonesia	0.23	5.78
Shanghai Yaoji Technology Co., Ltd.	China	2.08	5.93
Siam City Cement PCL	Thailand	4.24	6.57
SINOPEC Engineering (Group) Co., Ltd.	Hong Kong	0.42	6.77
Sungwoo Techtron. Co., Ltd	South Korea	3.23	6.60

\* Cash level at less than 2%  
\* Price (US\$) as at 07 Dec

### How to beat Deep Deep

To beat our Deep Deep AI is very simple. All you need is to overweight your portfolio in these tech stocks with disproportionate index weightings and if the tech sector recovers, you will win. Hang on. Isn't that the typical strategy used by fund managers to bet heavily on FAANG stocks? And aren't their portfolios decimated by 30%–40% due to the overconcentration of tech stocks?

We don't need to look far. **Amazon** has fallen by 46% and **Netflix** by 60% from their respective peaks.

It is like a gambler walking into a casino and putting most of his chips betting on red in roulette. On the other hand, our AI is like the house in *Casino Royale*. We play the long game with consistent marginal wins and we allow a few gamblers to walk out thinking they are *Gods of Gamblers*. Do you want to be a gambler with transient glory or should you stick with

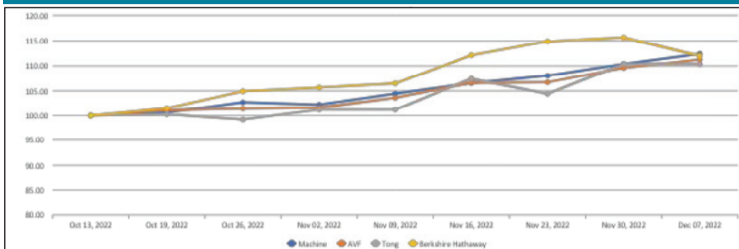
the efficiency of the casino? Like the movie *Matrix* when Keanu Reeves was offered the choice between the red or blue pill, the choice is yours.

### The importance of data points

In celebration of the World Cup frenzy, we will answer a reader's question: Why don't you train your AI to predict the World Cup winners instead? The simple answer is machine learning will unlikely succeed. There are 21 World Cups so far and this year, there are 64 World Cup matches excluding the qualifying matches. This works out to  $21 \times 64 = 1,344$  matches.

Let's imagine we have a database that captures all the player stats, individual team scores and other indicators. There are still not enough datapoints to train the AI. For instance, if you want to train an AI to identify an animal as a dog or cat — the defined parameters plus millions of dog

## Performance comparison



## How the portfolios stack up (%)

Portfolio	1-week change	1-month change	Since inception
Machine	1.84	7.61	12.40
Aggregate Value Fund	1.51	7.36	11.26
Tong's Portfolio	2.88	11.24	13.55
Berkshire Hathaway	-3.22	5.14	11.95
Dow Jones	-1.89	4.77	10.98
MSCI ACWI	0.82	9.63	16.28
MSCI AC AP	-2.85	1.58	12.18

## Top 5 Deep Deep picks (1-month performance)

Stock Name	Country	Performance
Hutchison Port Holdings Trust	Singapore	22.75%
Sharp Corporation	Japan	17.87%
Conn's Inc	United States	16.41%
Supalai PCL	Thailand	15.59%
IG Group Holdings plc	United Kingdom	12.29%

and cat images make it much easier. What about financial data? Our ever-growing database comprises stock pricing histories of 19 countries over 15 years and we look at the datapoints of about 30,000 stocks in our "universe". You would have thought in this digital age, financial data is cheap, accurate and available. Not true. Our quants need to remove the errors, amalgamate from multiple sources and check for data integrity. And that process itself is one of the proprietary advantages we offer

to our investors in Aggregate Asset Management. ■

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*perfect alignment with your interest*

## Battle of the Portfolios challenge

The table above shows the 15 stocks picked on Oct 17 by Aggregate Asset Management to form a concentrated, proprietary AI-picked portfolio. This machine-picked portfolio will challenge human stock pickers via the following competing portfolios and benchmarks:  
a. Aggregate Asset Management's diversified fund, Aggregate Value Fund, with nearly 1,000 stocks picked by human inputs but enhanced by AI stock screening.

b. Tong's Portfolio which has been published in *The Edge Singapore* since December 2017.  
c. Warren Buffett's investment vehicle Berkshire Hathaway's stock performance.  
d. Dow Jones Industrial Index, MSCI All Country World Index (MSCI ACWI) and MSCI AC Asia Pacific (MSCI AC APAC) will be included as reference benchmarks.  
Next month onwards, we will publish an updated table showing the relative performance of these portfolios and benchmarks, and we will continue to do so monthly for a year. In October 2023, we will declare the winning portfolio based on the highest portfolio return. For simplicity, all our portfolios' returns and benchmarks will be in US dollars for easy comparison.