

Prospectus | AVRF

# Avareum RoboFund



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# Introduction

In the modern financial landscape, the integration of advanced technology with investment strategies is crucial, especially within the highly volatile cryptocurrency market, which operates continuously and attracts global investors seeking high yields. Institutions and sophisticated traders increasingly use automated trading to exploit market fluctuations and capture alpha returns effectively. This trend signifies a substantial shift towards technology-driven investment methodologies.

Individual investors may enhance their investments through solutions offered by centralized exchanges, such as financial market data and automated trading services. However, this remains challenging due to the steep learning curve and the need to effectively leverage technology.

Given the aforementioned challenges, Avareum RoboFund has been designed as an algorithmic fund that encompasses all aspects of the investment process, including asset selection, trading parameter optimization, and risk management with real-time monitoring. The fund offers a complementary investment option for individual investors who seek capital appreciation in the digital asset market.

# **Investment Objective**

Avareum RoboFund offers a complementary alternative investment through algorithmic trading in digital asset markets, aiming to generate alpha. Suitable for investors without cryptocurrency exposure and those seeking uncorrelated portfolio enhancement.

Our automated systems execute diverse strategies beyond traditional operations, mitigate market risks by selecting uncorrelated assets, and employ volatility targeting to maintain a balanced risk-return profile.

# **Terminology**

# Alpha

Alpha is the excess return of an investment that exceeds and is independent of the market return.

# Volatility

A statistical measure of the dispersion of returns around the average return of a security or portfolio. High volatility indicates a greater potential for deviations from the expected return.

#### Correlation

Correlation is a statistical measure indicating how two securities move in relation to each other. Uncorrelated securities indicate that the price movement of one does not influence, nor is influenced by, the other.

## **Trading parameters**

The parameters utilized in the automated decision-making process include factors such as lookback periods for technical indicators, appropriate trading intervals.

# High-water mark

The maximum net asset value (NAV) attained by an investment fund or account to date.

## **Grid trading**

Grid trading involves placing buy and sell orders at predefined price levels, forming a grid of orders above and below a target price to profit from market volatility.

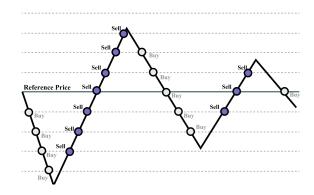


Figure 1: This chart illustrates the movement of asset prices and the relevant Grid trading actions



# Fees and Expenses

This table describes the fees and expenses that you may pay if you buy, hold, and sell shares of the fund.

Management fee <sup>1</sup>	2%
Performance fee <sup>2</sup>	20%
Front-end fee <sup>3</sup>	3%

- (1) **Management fee**, calculated at an effective rate of 2% per year based on the AUM size, is charged monthly.
- (2) **Performance fee**, calculated at 20% on returns that exceed the fund's high-water mark, is charged during the subscription and redemption process.
- (3) **Front-end fee** of 3% is charged on the deposited funds.

#### Performance fee calculation

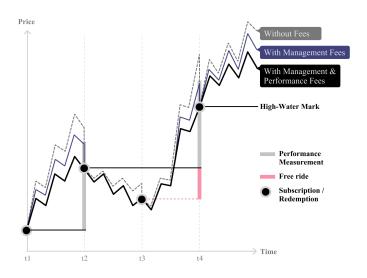


Figure 2: This chart illustrates the fund performance with and without fees, where t1, t2, t3, and t4 mark the points of subscription and redemption.

t1 marks the initiation point of your investment.

t2 is when your investment starts to generate profit, at which point performance fees will be calculated based on the capital gain.

t3 represents a decline in investment vallue relative to t2; any additional subscription at this point will not incur performance fees until the high-water mark is surpassed, thus benefiting from a free ride.

**t4** denotes the point at which your investment achieves its highest profit. Performance fees are then calculated based on the high-water mark, assessing the investment profit from t2 to t4.

# Calculation example

This example is intended to help you compare the cost of investing in the fund. This example assumes that you invest \$30,000 in the fund for the periods indicated and then sell all of your shares at the end of those periods. The example also assumes that your investment has a 20% return compounded each year and that the fund operating expenses remain at current levels.

Although your actual costs may be higher or lower, your costs, based on these assumptions, would be:

Initial Deposit	\$30,000
Front-End Fee	\$900
Invest	\$29,100

	1 Year	3 Years
No fees	\$34,920.00	\$50,284.00
With Management fees	\$34,221.60	\$47,327.65
With Management and Performance fees	\$33,197.28	\$43,930.89



# **Principal Investment Strategies**

Avareum RoboFund integrates the discretionary judgment of the fund manager with quantitative methodologies to select a diverse group of assets, aiming to construct a stable portfolio. The fund employs data-driven approaches and backtesting to determine optimal trading parameters and develop robust strategies that deliver consistent performance across varying market conditions. Additionally, it manages risk in real-time through a dual-layer risk management framework and risk monitoring system, ensuring comprehensive oversight and adaptation to market dynamics.

#### Asset selection

The fund's asset selection process consists of two criteria: qualitative and quantitative criterias.

In the qualitative selection criteria, guided by our fund management team's discernment, certain assets may be excluded from the portfolio based on fundamental attributes to reduce asset specific risks.

In the quantitative selection criteria, assets are filtered by market capitalization, selecting from the top 50 assets available on eligible trading platforms in both spot and futures markets. This process reduces instability and avoids asset manipulation. These assets must also pass a liquidity assessment, requiring an order book depth of at least \$100,000 to mitigate liquidity risk. To mitigate the risk of strategy failure spreading across assets, we construct a portfolio that minimizes the sum of correlation magnitudes, thus ensuring robustness across different market conditions.

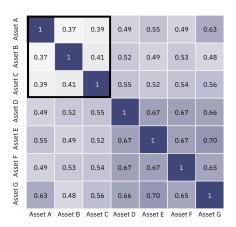


Figure 3: This heat map illustrates the group of selected assets that minimize the sum of correlation magnitudes.

#### Asset allocation

Avareum RoboFund presents investors with a dual-layer asset allocation framework comprising volatility targeting and volatility budgeting.

#### Volatility targeting

Volatility targeting aims to maintain consistent overall portfolio volatility across dynamic and subdued market environments. The fund manager establishes a maximum risk tolerance for the portfolio and works to keep its volatility within this predetermined range.

To ensure the robustness of our strategies, the backtest is evaluated across a comprehensive range of predefined market conditions, including uptrends, downtrends, and sideways movements. A trading strategy is implemented only if it demonstrates resilience and efficiency across all these market scenarios.

#### Volatility budgeting

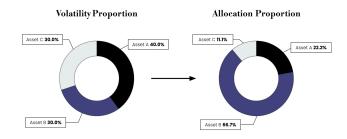


Figure 4: These charts illustrate capital allocation proportion derived from volatility proportion.

Volatility budgeting is an asset allocation strategy that constrains the proportionate contribution of individual asset volatilities to the overall portfolio volatility, ensuring it remains within a predefined threshold. For instance, equal volatility budgeting allocates smaller amounts to high-volatility securities, minimizing their contribution to overall volatility. This approach ensures that if one asset underperforms, its impact on the portfolio is balanced and mitigated by the others, maintaining overall stability.



# Multi-strategy approach

Our fund management team explores effective strategies available in the market, develops our own proprietary trading algorithms, and also fine-tunes them to align with our multi-strategy portfolio. This ensures robust performance across different market conditions, enhancing the fund's ability to adapt and thrive in various economic environments.

One strategy in our portfolio is grid trading, which includes long and short positions, dynamically adapting to market prices to capture profits from volatility using dynamic grid ranges, variable grid sizes, and multiple timeframes.

In the long term, we continuously expand our diverse trading strategies to maintain system performance under different market conditions.

# **Optimization & Evaluation**

Avareum RoboFund rigorously optimizes trading parameters for assets through a comprehensive backtesting process. This procedure replicates real trading environments using a reliable third-party platform and high-quality out-of-sample data, eliminating the risk of lookahead bias in past analysis simulations.

# **Principal Investment Risks**

## Counterparties risk

Potential loss if a third-party exchange or entity, such as centralized exchanges and automated trading cloud platforms, fails to meet obligations, including risks from security breaches, fraud, or insolvency.

# Currency exchange risk

Financial loss due to exchange rate fluctuations between different currencies, affecting the value of investments when profits or returns are converted back to the investor's base currency.

## Digital asset risk

Financial loss due to volatility, security vulnerabilities, regulatory changes, and technological uncertainties in digital assets like cryptocurrencies, including risks of hacking, fraud, market manipulation, and loss of private keys.

#### Market risk

The possibility of financial loss due to adverse market movements, affecting the value of investments across various asset classes.

#### Model risk

The risk of inaccuracies in financial models or errors in data, leading to potential losses due to flawed decision-making or predictions.

# Leverage risk

Increased potential for loss due to the use of borrowed funds, which can amplify both gains and losses, potentially leading to significant financial instability.

# Liquidity risk

The risk that an asset cannot be quickly sold or exchanged for cash without significantly affecting its price, potentially leading to financial loss in times of market stress.

#### Regulatory risk

The risk involves regulatory uncertainties related to digital assets that may arise from new laws, enforcement actions, and operational adjustments, requiring firms to stay agile and responsive.

# **Operational** risk

The possibility of financial loss resulting from inadequate or failed internal processes, systems, personnel, or external events.



# Performance

The return strategy focuses on capital gains achieved through automated trading systems. The annualized expected return, calculated based on backtesting using out-of-sample data and bullish market conditions, is 116% with an associated volatility of 26%. For a conservative estimate, the annualized return is adjusted to 35.73% after excluding returns above the 90th percentile. The below figure shows the performance of Avareum RoboFund since 1 May 2024.

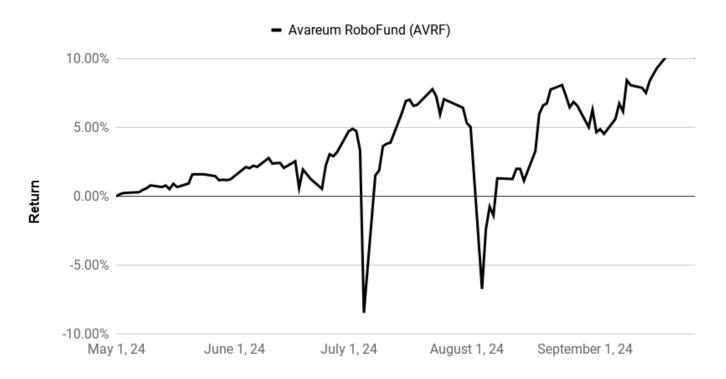
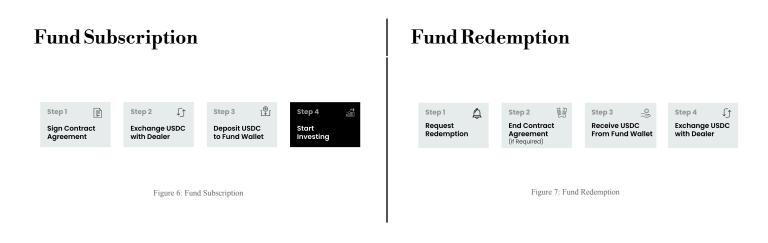


Figure 5: The performance of the Avareum RoboFund.





# **Management Team**



Niran Pravithana

Fund Manager

10+ years of expertise in the cryptocurrency and traditional financial markets as a speaker on the topics of AI, Macroeconomics, Cryptocurrency and Investment.

- Responsible for identifying fresh possibilities in the cryptocurrency market with evaluating fund strategy and overseen for Avareum and other companies under AVA Advisory.
- Formerly the CEO and Co-Founder of Market Anyware, a financial intelligence company that applies Big Data and Artificial Intelligence to investing decisions.



# **Theerawat Songyot**

Chief Al Scientist

8+ years of experience using natural language processing and deep reinforcement learning for asset management to develop machine learning solutions for financial businesses.

- Responsible for designing and implementing fund operation and building a connecting mechanism between fund operations and fund managers.
- Formerly Chief AI Scientist of Market Anyware, a financial intelligence company that applies Big Data and Artificial Intelligence to investing decisions.



Napat Vitthayanuwat

Risk Manager

8+ years of asset management experience in the traditional financial, investing, and technology sectors.

- Responsible for discovering new coin project opportunities and providing fund strategy advice in order to maximize fund performance.
- Formerly Assistant Fund Manager at AEC Securities
- Formerly Senior Investment Planner at Apple Wealth Securities



AVAREUM CAPITAL FUND

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