ALPHATRAI PUBLISHES WHITE PAPER ON INVESTMENT PORTFOLIO CONSTRUCTION THROUGH UNDERSTANDING RISK

Paper Serves as Intellectual Foundation for AlphaTrAI's Machine Learning, Automated Trading Algorithms

SAN DIEGO, Jan. 5, 2020 -- AlphaTrAI, Inc. a venture-backed, technology-driven asset management firm, today announced the publication of its first white paper, titled "Portfolio Construction Based on the Management of Tail Risk." Penned by AlphaTrAI's experts in data science, quantitative research and machine learning, the paper raises questions about the pitfalls of traditional methods of quantifying investment risk and proposes new approaches that more precisely model risk, particularly that of rare but extreme downside scenarios.

Headquartered in San Diego and backed by Analytics Ventures, a venture capital firm focused on investments in companies with artificial intelligence at their core, AlphaTrAI's automated trading platform uses a proprietary set of machine learning algorithms to adjust the market exposure of its fund, mitigating human-based biases. The company launched its first investment strategy, the Domestic Performance Fund, in October.

A crucial part of AlphaTrAI's models is their ability to capture tail risk – the probability of extreme market events that because they are very rare, if not unprecedented, are difficult to quantify. Traditional approaches to estimating risk are rooted in standard deviation, or volatility, a measure of average price fluctuations over time that is widely favored for its simplicity but doesn't accurately model the magnitude or frequency of extreme decreases. There are standard methods of quantifying tail risk, as well as probabilistic models that shed light on risk over time, but both also have limitations.

The key is using cutting-edge machine learning algorithms that leverage data science and other analytical and statistical methodologies that dynamically incorporate new data to construct and maintain efficient portfolios. Over time, these algorithms can manage long-term tail risk while still garnering robust performance.

"The holy grail in portfolio optimization is to provide significant market exposure during market rallies and reduced exposure before market downturns. The vast majority of portfolio construction approaches fail at this," the authors write. "Models are required to adapt to and learn from new information. This is the science and the art behind portfolio construction."

The authors of the paper bring together decades of combined experience in artificial intelligence, math and science and quantitative research methods. The team consists of:

- Hudson Cooper, AlphaTrAI Director
- Jason Wilkes, AlphaTrAI Director of Machine Learning
- Yury Kiselev, AlphaTrAI Director of Research
- Homa Karimabadi, AlphaTrAI Chief Science Officer

Andreas Roell, CEO of AlphaTrAI, said, "AlphaTrAI is a unique combination of asset management experts, mathematicians, scientists and artificial intelligence professionals that are putting their collective brainpower behind better understanding and mitigation of investment risk. The insights outlined in this white paper serve as the intellectual foundation for our mission at AlphaTrAI to modernize asset management to become more dynamic, responsive and precise, while rising above the emotionally driven bias and behaviors that can impair investor outcomes."

About AlphaTrAI

AlphaTrAI is a San Diego-based portfolio company of the VC firm Analytics Ventures. The firm's AI-enabled automated trading platform incorporates an orchestrated set of strategies that continually monitor and forecast risk and reward balance and makes dynamic adjustments to ensure optimized performance under diverse market conditions.

For more information, please visit www.alphatrai.com.

# # #

Media Contacts

Joseph Kuo / Michael Dugan
Haven Tower Group LLC
424 317 4851 or 424 317 4852
jkuo@haventower.com or mdugan@haventower.com