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BullFrog AI Publishes Whitepaper on AI in Bioinformatics: Turning Complex Data into Actionable Insights

New publication details how BullFrog Data Networks® and bfLEAP® technology address fundamental AI challenges in drug discovery and development

GAITHERSBURG, Md., Nov. 18, 2025 (GLOBE NEWSWIRE) -- BullFrog AI Holdings, Inc. (NASDAQ: BFRG; BFRGW) ("BullFrog AI" or the "Company"), a technology-enabled drug development company using artificial intelligence (“AI”) and machine learning to enable the successful development of pharmaceuticals and biologics, today announced the publication of a new whitepaper titled “AI in Bioinformatics: Turning Complex Data into Actionable Insights with BullFrog Data Networks®.”

“The life sciences industry has reached an inflection point,” said Vin Singh, CEO of BullFrog AI. “Data abundance is no longer the issue—interpretation is. Our technology is designed to cut through the noise, delivering clarity where other AI tools struggle. This whitepaper shows exactly how we’re doing that with BullFrog Data Networks® and bfLEAP®, helping pharmaceutical partners move from data overload to data advantage. For investors, it underscores our growing leadership in the application of causal AI and bioinformatics, two of the most critical frontiers for value creation in drug development.”

Addressing the Bioinformatics Bottleneck

The whitepaper identifies three major pitfalls in modern bioinformatics: the compositional data trap, the mirage of feature importance, and the overreach of generative AI. Each contributes to the high failure rate in clinical development and the waste of billions in R&D investments annually.

BullFrog AI’s bfLEAP® platform overcomes these challenges through causal inference modeling and probabilistic validation methods originally developed at the Johns Hopkins Applied Physics Laboratory. When integrated into BullFrog Data Networks®, these capabilities enable reproducible insights across multimodal datasets—including genomics, transcriptomics, proteomics, and clinical data—creating a foundation for more reliable target identification, biomarker discovery, and patient stratification.

Positioned for Industry Transformation

The publication reinforces BullFrog AI’s expanding role in solving one of the most pressing problems in drug development: the disconnect between massive data availability and actionable biological understanding. The Company believes its modular, scalable approach

—combining bfPREP™, bfLEAP®, and BullFrog Data Networks®—is well positioned to become a cornerstone of AI-enabled R&D infrastructure for global pharmaceutical and biotech organizations.

“Our whitepaper is more than an academic discussion, it’s a roadmap for how AI can finally deliver measurable impact in pharma,” Mr. Singh added. “We are demonstrating that BullFrog AI’s causal and explainable frameworks can make drug development more efficient, predictable, and ultimately, more profitable for our partners and shareholders.”

The full whitepaper is available for download here.

About BullFrog AI

BullFrog AI leverages Artificial Intelligence and machine learning to advance drug discovery and development. Through collaborations with leading research institutions, BullFrog AI uses causal AI in combination with its proprietary bfLEAP® platform to analyze complex biological data, aiming to streamline therapeutics development and reduce failure rates in clinical trials.

For more information visit BullFrog AI at: https://bullfrogai.com

Safe Harbor Statement

This press release contains forward-looking statements. We base these forward-looking statements on our expectations and projections about future events, which we derive from the information currently available to us. Such forward-looking statements relate to future events or our future performance, including: our financial performance and projections; our revenue and earnings; and our business prospects and opportunities. You can identify forward-looking statements by those that are not historical in nature, particularly those that use terminology such as "may," "should," “could,” “will,” "expects," "anticipates," "contemplates," "estimates," "believes," "plans," "projected," "predicts," "potential," or "hopes" or the negative of these or similar terms. In evaluating these forward-looking statements, you should consider various factors, including: our ability to change the direction of the Company; our ability to keep pace with new technology and changing market needs; our and our partners’ ability to market and sell our offerings and services, including BullFrog Data Networks™; our ability to maintain compliance with Nasdaq listing rules; and the competitive environment of our business. These and other factors may cause our actual results to differ materially from any forward-looking statement. Forward-looking statements are only predictions. The forward-looking events discussed in this press release and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties, and assumptions about us. We are not obligated to publicly update or revise any forward-looking statement, whether as a result of uncertainties and assumptions, the forward-looking events discussed in this press release and other statements made from time to time by us or our representatives might not occur.

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