Cognizant's AI Lab Records 59th U.S. Patent, Continuing to Generate AI Breakthroughs

In 2025, the Lab has yielded two new U.S. Granted Patents, open-sourced a key AI development platform, and earned a Gold Award from GECCO

TEANECK, N.J., July 24, 2025 /PRNewswire/ -- Cognizant (Nasdaq: CTSH) today announced that itsAI Lab has been granted two new U.S. patents and a gold award for a research paper on "Realizing Human Expertise through AI" presented this month at GECCO (Genetic and Evolutionary Computation Conference) in Malaga, Spain.

"Being granted two new U.S. patents in the first half of 2025—bringing our AI Lab's U.S. total to 59 with 23 more patents pending—underscores our relentless pace of innovation," said Babak Hodjat, CTO of AI at Cognizant. "Couple this with a Gold Award at GECCO and these milestones reflect our deep commitment to pioneering transformative AI technologies and turning cutting-edge ideas into real-world impact."

The two latest patents highlight key innovations from Cognizant's AI research:

- **U.S. Patent No. 12,282,845** (issued on April 22, 2025) covers a method for Multi-objective Coevolution of Deep Neural Network Architectures, aimed at improving model performance and resource efficiency. The method's application ranges from medical image classification to natural language processing.
- **U.S. Patent No. 12,292,944** (issued on May 6, 2025) outlines a method for optimizing loss functions through Taylor Series Expansion, aiming to improve training efficiency and enhance model robustness, especially is data-limited scenarios.[1]

These innovations, developed by Cognizant's researchers including Dr.Jason Liang, Dr. Elliot Meyerson and Professor Risto Miikkulainen, reinforce Cognizant's leadership in pushing the boundaries of AI and machine learning.

To make the promise of artificial intelligence both more practical and broadly accessible, earlier this year, Cognizant's AI Lab open sourced its Neuro AI Multi-Agent Accelerator. Neuro AI helps businesses accelerate their development and adoption of AI agents, transforming their business processes for adaptive operations, real-time decision-making, and personalized customer experiences tailored to client-defined objectives and oversight.

The Cognizant AI Lab, which opened its San Francisco-based flagship AI research facility inMarch 2024, has also been honored with the Gold Award for Human-Competitive Results at GECCO 2025 for its groundbreaking work on RHEA (Realizing Human Expertise through AI). Developed by Dr. Elliott Meyerson and Professor Risto Miikkulainen RHEA employs evolutionary AI to distill and recombine hundreds of models generated by human expert teams—most notably those submitted to the XPRIZE Pandemic Response Challenge—into refined decision strategies. In a rigorous evaluation, RHEA surpassed the performance of individual human submissions, realizing the latent potential even in incompletely developed human ideas, resulting in innovative pandemic policy recommendations. This milestone underlines Cognizant's leadership in harnessing global human expertise to drive next-generation AI solutions.

Risto Miikkulainen, VP of Research and Professor of Computer Science at UTAustin, said, "RHEA is a powerful example of how evolutionary AI can amplify global human intelligence—not just by matching expert solutions, but by going beyond them to discover novel, high-impact strategies. This recognition by the Humies Award committee reinforces the promise of population-based AI as a foundation for solving the world's most complex challenges."

About Cognizant
Cognizant (Nasdaq: **CTSH**) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life. See how at **www.cognizant.com** or @cognizant.

About the Cognizant AI Lab
The mission of the Cognizant AI Lab is to maximize human potential with Decision AI, a form of AI that combines generative AI, multi-agent architecture, deep learning, and evolutionary AI to create sophisticated decision-making systems. Decision AI powers Cognizant's Neuro® AI platform, which is utilized by Fortune 500 companies and non-profits to discover new ways to exceed their goals. The platform enables organizations to rapidly build AI that optimizes decision-making, leading to revenue growth and societal progress.

Led by AI pioneers Babak Hodjat and Risto Miikkulainen, the lab collaborates with institutions, academia, and technology partners to develop groundbreaking AI solutions responsibly. With over 120 patents (issued or pending) globally, the lab excels at combining scientific innovation with commercial application. It supports Cognizant's goal of improving everyday life, focusing on business and AI-for-good applications.

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1 Descriptions of patented technologies are simplified for general understanding. For full legal scope, please
refer to the issued patents linked above

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