

Noesis Solutions launches nvision, an AI-powered modelling tool to accelerate innovation.

Key highlights:

- *Noesis Solutions adds nvision, an AI-powered surrogate modelling tool, to its product portfolio to enable faster product development.*
- *The surrogate modelling technology of nvision 2024.1 expedites the design process by reducing simulation hours & computational resources, enabling more design variations, and accelerating innovation.*

Leuven, March 6, 2024: Noesis Solutions, a trusted digital engineering transformation partner, announced the launch of nvision, an AI-powered surrogate modelling tool, that enables engineers to perform almost real-time predictive analysis of their designs, powered by the latest Artificial Intelligence (AI) technologies. nvision is an open, solver-agnostic modeling tool, that drastically reduces design time by performing real-time ‘what-if’ studies and it enables access to simulation data to cross-functional experts through its intuitive interfaces and processes.

Real-time predictions with the power of AI

Designing complex engineering systems often requires many iterations of engineering simulations that are computationally expensive to run. Solvers and parameters must often be tuned individually for each system to be studied. In today’s volatile market environment, where time is money, engineers are consistently seeking ways to improve productivity without sacrificing the accuracy and the quality of new product designs, with an imperative of shorter time-to-market. With nvision’s AI and physics-agnostic machine learning technologies, engineers can easily build and train a high-fidelity, parameterized surrogate model and predict the performance of their products almost instantaneously.

“Our customers across industries are becoming more reliant on new methods to accelerate their design processes. This increased demand to shorten design process time along with the power of AI - infused into the design process along with simulation, enables the engineers to redefine and gain more value out of existing data. This opens a world of possibilities for organizations across industries to develop competitive products with inherent time and cost saving benefits.”, commented **Georgios Papantonakis, Chief Product Officer, Noesis Solutions**, about the conceptualization of nvision.

“With nvision, our goal is to work alongside our partners accelerate their research and development processes, shorten product development cycles, and promote innovation with the power of data – both historic and new, enabling expansive design exploration opportunities”, he added.

Convert historic data into insights for tomorrow

Modern engineering companies have embraced simulation technologies to design and test their new products, thereby reducing the need for manual testing. Recycling the dormant know-how data from past simulations data, that has already consumed time and resources, to train surrogate models with, serve for a safer and a more competitive product with a shorter time-to-market and less usage of resources. This will enable engineers and designers to make more educated designs at the inception of their projects with the integration of reduced order modelling, exemplified by nvision.

“With nvision, engineers can not only expedite their design processes, but also reuse their historic simulation data to gain new insights from them, ultimately redefining the perception of what is possible. By recycling the wealth of knowledge encapsulated in previous and recent simulations, nvision provides a multidimensional map for their designers to navigate, allowing them to anticipate potential failure points in the future projects”, said Ceyhun Sahin, Product Owner – nvision, Noesis Solutions.

nvision is an open, solver-agnostic modeling tool that enables simulation engineers, designers and product owners to reduce design time by leveraging existing knowledge from simulation studies, perform real time what-if studies and decision making and speed up product development without spending time and effort with unnecessary simulation iterations.

To know more about nvision, contact our sales teams through info@noesisolutions.com.

About Noesis Solutions

Established in 2003, Noesis Solutions, a trusted digital engineering innovation partner, has empowered customers to adopt a transformational strategy that resolves their toughest multidisciplinary engineering challenges of today. Our continuously evolving product portfolio, state-of-the-art technology, and unmatched customer services enable customers transform the way they build their products in a much faster and an efficient manner.

Noesis Solutions is a majority-owned subsidiary of Cybernet Systems, a leading provider of multi-domain CAE (Computer Aided Engineering) solutions covering a vast range of engineering problems. Headquartered in Leuven, Belgium, Noesis Solutions operates through a network of subsidiaries and representatives in key locations around the world. For more information, please visit www.noesisolutions.com.

Media contact:

Anisha Gopinath

anisha.gopinath@noesisolutions.com