NEXUS

is a new foundational AI architecture based on artificial swarm intelligence

Logistics
Pharma
Defence
Economics and financial predictions
Fields sports analysis
and many more

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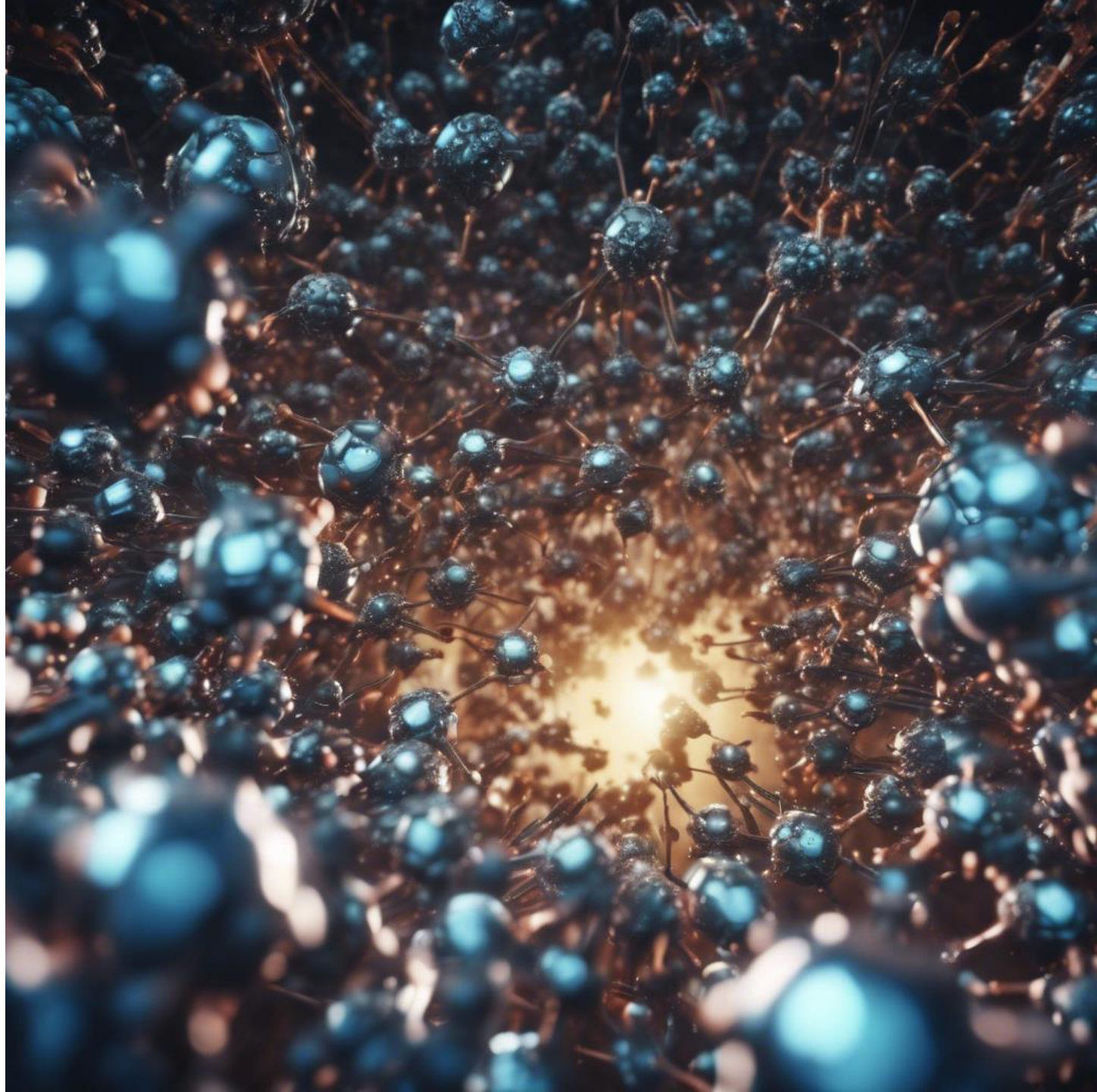


THE PROBLEM

“Current generative AI models struggle or even fail when faced with solving complex math, analytical and optimisation computations, forcing developers to manually create unique algorithms when building complex systems for their clients.

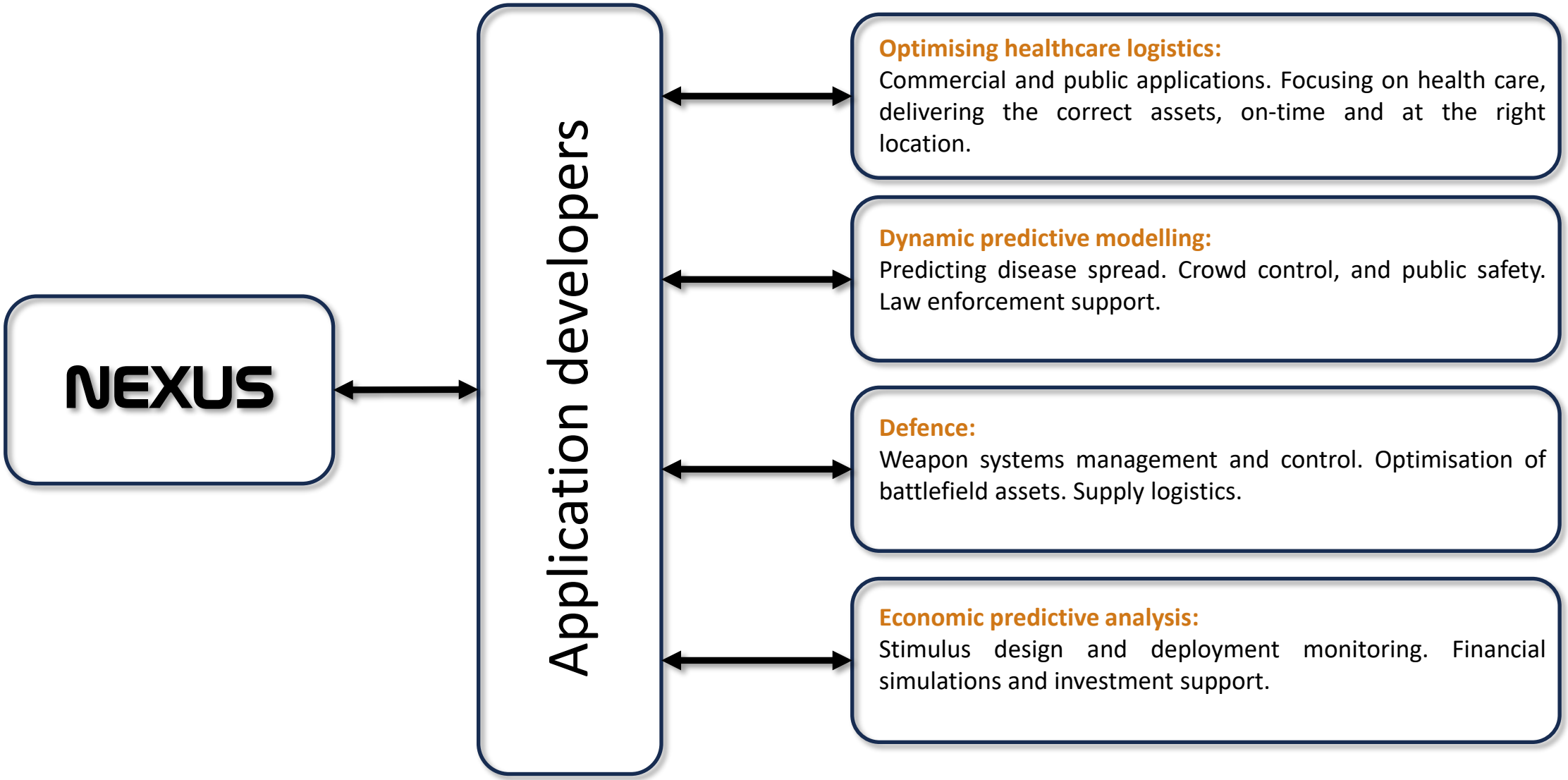
This approach slows development, increases costs, and sometimes limits the capabilities that can be built into customer facing solutions.

A new foundational AI, that can think and generate unique solutions, is needed to efficiently solve complex math, optimisation and analytical problem.

This is why we have created **NEXUS***”.*

David Gammond - CEO

EXAMPLE APPLICATIONS



These are a sample of the large number of applications that can be powered by **NEXUS**.

ACCESS

Our target clients for **NEXUS** are developers servicing large and medium sized corporates, for whom they are running analytical systems, processing complex mathematical problems, utilizing large volumes of data for optimisation purposes, or designing complex structures.

Our clients can access **NEXUS** through a bespoke API, purpose built for each individual use case.

We can also build bespoke systems for clients based on the **NEXUS** engine. These systems are provided on a full development and support basis.

We are currently working on a conscious version of our AI which we call **NEXUS.C**. This AI is being built to deliver a highly efficient human to machine interface, beyond anything that is available today. **NEXUS.C** will be aware of what it is being asked to do, who is doing the asking and will decide for itself how best to serve the user.

Please contact us to discuss your particular needs.

mail@maxamlabs.io

HOW IT WORKS

We have shown that emergence* is created by the **NEXUS** architecture, using an environment filled with what we call Dants (Digital Ants). Running their evolution at thousands of times natural speed, we have created an intelligent, thinking AI capable of solving real world problems.

Mathematical, analytical and optimization problems can be input into **NEXUS**. These problems include warehouse optimization and route planning, investment strategies, climate change or designing new pharmaceuticals.

The Dants swarm around the problem to discover the most efficient path to a solution, working together they create chains of processes. These chains are then used to solve the problem creating the output.

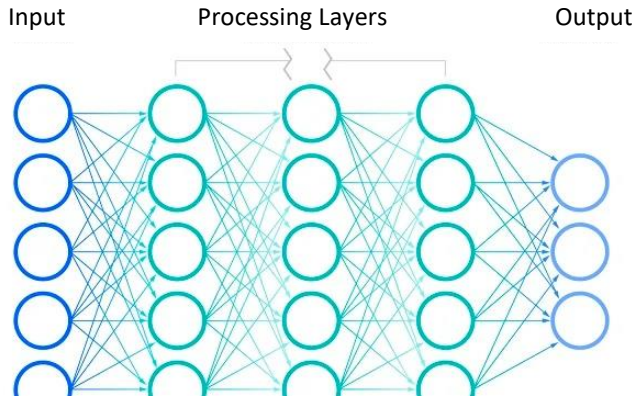
NEXUS is a core technology which creates artificial intelligence in a completely different way to generative AI or LLMs. We have found that by utilizing the power of emergence, **NEXUS** is able to evolve original, efficient solutions.

*Emergence occurs when a complex entity has properties or behaviours that its parts do not have on their own and emerge only when they interact in a wider whole.

Typical generative AI architecture comprises a network of neurons which contain data. These neurons are linked together using parameters.

Input is passed through the processing levels, which make decisions to create an output that is based on training data.

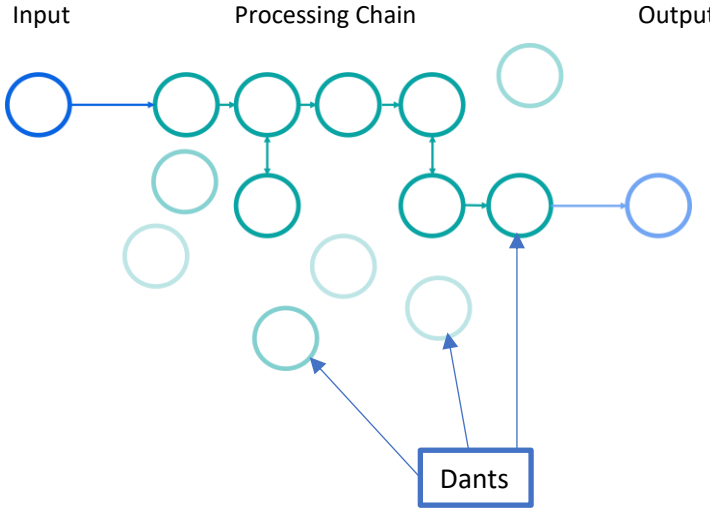
This architecture is very good at processing text but lacks ability when processing complex math.



In **NEXUS** dants are created with differing mathematical skills and other attributes, such as the ability to call on external AI models and other services.

Driven by the input, the dants swarm and stick together to form processing chains. The chains are created through a set of rules that trigger computational emergence.

Once the most efficient processing chains possible are created the remaining dants are removed from the system until again needed.



FOUNDERS

"Our founders are a team of highly motivated and experienced people. Building a completely new AI model and bringing it to market requires exceptional talent.

I am proud of our journey, and I am incredibly excited about what we will achieve as we continue to develop NEXUS".

David Gammond
Founder & CEO

David Gammond
Chief Executive Officer

I have worked in the computer industry for over 40 years, supplying computer technology to both large and small companies. Past projects include data capture rigs for particle accelerators, manufacturing systems based on IBM MAPICS, biotechnology and office automation.

For almost 30 of those years, I have been fund raising for tech projects and companies. These include renewable energy, biotechnology, broadcasting, fintech and SaaS providers.

I am based in Manchester, England.

FOUNDERS

Brandon Lin
Chief Science Officer

I have a MEng in Computer Science. Formally educated in cloud architectures, artificial intelligence, machine learning, deep learning, image processing, computer vision, and high-performance computing, I wrote my dissertation on Computational Psychology, the study of how and why deep learning neural networks interoperate data, and what that means for machine learning models.

I am a full stack developer with extensive programming, networks and cloud experience.

I am based in Bristol, England.

Kyle Bradley
Chief Technical Officer

I am an experienced CTO who has actively supported numerous businesses in building out their solution and teams in the pursuit of achieving product-market fit. As such, I have exposure to all aspects of product development and team growth given different stages of a company.

I most recently supported Umazi with their client growth and subsequent fund-raise. Before that, I helped grow two start-ups, from ideas to successful products. These are HouseME, where I was the CTO, and WhereIsMyTransport, where I was a development lead for their flagship product.

I am based in Leeds, England.

FOUNDERS

Nancy Singha
Head Engineering and Programming

I am an experienced data engineer with experience in life sciences and finance. I recently graduated with a Master of Science in Big Data and High-Performance Computing from the University of Liverpool with merit.

I am proficient in ETL development, Data modelling, SQL, Python, Big data technologies and Master Data management.

I enjoy working with new tools and technologies.

I am based in London, England.

Nithin Nampoothiry
Head Analytics and Data

I attained a Master's degree with distinction, marking the onset of a rewarding analytics career. My ability to transform complex data into actionable strategies was further exemplified by establishing a robust operational framework and delivering crucial metrics at NHS Property Services and Mitie.

My focus is set on driving data-driven decisions to propel our ambitious venture toward groundbreaking success in swarm AI solutions.

I am based in Leicester, England.

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Without their valued support building **NEXUS** would not be possible.

Visit our website to learn more: www.maxamlabs.io

YouTube videos on this subject which you might find interesting:

https://www.youtube.com/watch?v=16W7c0mb-rE&t=38s

https://www.youtube.com/watch?v=LHgVR0lzFJc

https://www.youtube.com/watch?v=U93x9AWeuOA

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