

Arnold NextG as innovation accelerator uses GTC Race as development platform for the future

With his company Arnold NextG, Kevin Arnold is working on the mobility of the future. The multiple redundant drive-by-wire technology developed by Arnold NextG paves the way for safe autonomous driving. Now the young company from the Swabian Alb is joining the GTC Race as a partner and wants to use the racing series as an innovation and data platform in the future.



The multi-redundant NX NextMotion central control unit from Arnold NextG provides the necessary road approval up to autonomous driving (Level 5). Source: Arnold NextG

Motorsport as a development accelerator works for established corporations as well as ambitious startups. And Kevin Arnold knows all about ambition. The former champion of today's GT60 powered by Pirelli and eldest son of visionary Roland Arnold hung up his active motorsport career in 2018 but is now returning to racing as an entrepreneur. He is joining the GTC Race immediately with his startup, Arnold NextG, as an innovation partner. In the future, the racing series will not only serve as a development environment for Arnold NextG's drive-by-wire technology but also become an innovation accelerator for vehicle dynamics applications, data models, and digitization projects from the entire automotive industry.



Establishing future technologies in motorsport

Motorsport, like the entire automotive industry, is facing profound changes. "We must perceive this challenge as an opportunity!" emphasizes Kevin Arnold in light of the partnership with GTC Race. "We now have a unique opportunity to combine racing as a workshop for the automotive industry with innovative and digital future technologies. Drive-by-wire is just the beginning!" The enterprising founder, for example, is interested in new approaches to the education and training of racing talents. It would be possible, for instance, to send an artificial intelligence (AI) as a lead vehicle on the track, followed by a group of racing cars in platooning mode. On board would be young racers who would "experience" the perfect braking, steering, and acceleration points in this way.

The key to such innovative solutions lies in the friction data between the road surface and the wheel, which Arnold NextG's electronic steering and braking system continuously measures and can provide to providers of autonomous driving systems and sensor manufacturers (camera, radar, LiDAR) via flexible interfaces. In combination with the corresponding algorithms, this enables the assistance and driving systems to calculate the vehicle dynamics of almost any vehicle at any speed safely. This so-called "vehicle dynamics estimator" is currently being brought to series maturity by Arnold NextG and forms the basis for safe autonomous driving.

Basis for safe autonomous driving and barrier-free mobility

The elimination of mechanical connections in steering, braking, or driving systems not only allows for a complete redesign of the vehicle interior but also forms the basis for any autonomous series application through Arnold NextG's multi-redundant safety by wire© concept. Furthermore, this results in enormous opportunities for the future of barrier-free mobility. The possibility for individuals with severe mobility restrictions to participate independently in road traffic and benefit from all developments in the field of autonomous and automated driving, assistance, and safety systems drives the entire team of Arnold NextG. The digitization of previously manual or hydraulic vehicle functions also guarantees maximum precision and unique control, representing a true revolution in the entire automotive and mobility industry.

During the competitions within the ADAC Racing Weekend 2023, Arnold NextG will now focus not only on the fastest lap time. The emphasis will be on testing and further developing the drive-by-wire technology, which the company aims to make ready for series use by the middle of the decade in collaboration with other partners. This requires excellent developers and specialists above all. Entry opportunities are available at the rapidly growing technology company's three locations in Aichelau, Rüsselsheim, and Düsseldorf.

<https://www.arnoldnextg.com/career.html>

PRESS RELEASE

Pfronstetten-Aichelau | 01.06.2023



Kevin Arnold, CEO of Arnold NextG, said: "Traditionally, motorsport is the ideal development platform for innovative technologies. Therefore, the partnership with GTC Race is the ideal environment for our young team to further develop our systems under the most challenging conditions. We have the data, the control unit, and the experience to revolutionize the automotive industry. Safe autonomous mobility is only made possible by Arnold NextG! We control what will move the future!"

Dates GTC Race 2023

2 - 4 June	Lausitzring
30 June to 2 July	Nürburgring
28 to 30 July	Oschersleben
13 to 15 October	Nürburgring

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GTC Race is not only intended to serve as a development environment for Arnold NextG's drive-by-wire technology, but to become an innovation accelerator for vehicle dynamics applications, data models and digitalisation projects from the entire vehicle industry.

Source: GTC Race



Until 2018, Kevin Arnold was still active in racing. Today, the 23-year-old is working on the mobility of the future with his start-up Arnold NextG.

Source: Arnold NextG

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About Arnold NextG GmbH

Arnold NextG realizes the Safety by Wire®-Technology of tomorrow with pioneers of the drive-by-wire industry - whether on land, on water or in the air (steer-, drive- & fly-by-wire). We offer the globally unique and multi-redundant central control unit NX NextMotion, which complies with the latest regulations and enables fail-safe and individual implementation in all application areas. As an independent advance developer, incubator and system supplier, Arnold NextG takes care of planning and implementation - from vision to road approval. www.arnoldnextg.com