



All CCS and Cross-sectoral Music Performing Arts Germany Artificial Intelligence

Robot debuts as conductor for Dresden Sinfoniker

A robot conducted a 20-piece ensemble of the Dresden Sinfoniker, showcasing its ability to communicate complex musical compositions.

[MAiRA Pro S](#) conducted its [first show](#) with the Dresden Sinfoniker yesterday, Sunday 13th October 2024. NEURA, a company specialised in developing intelligent tech, has designed a cognitive machine which is able to see, hear and sense its surroundings. It debuted in a performance series designed to showcase the cutting-edge advancements in robotic conductors, as well as music composed specifically to leverage 21st-century technology.

The event marked the 25th Anniversary of the orchestra which carries a [mission](#) to tell living stories that stay close to political and social challenges, using technology as a tool for connecting people. In [2008](#), Michael Helmuth, conducted the orchestra live from the banks of the Thames via satellite in the first example of a remote controlled conductor. MAiRA, built of three arms, went beyond human capabilities, conducting a piece too complex for a single human conductor. Composer [Andreas Gundlach](#) wrote the aptly titled Semiconductor's Masterpiece for 16 brass musicians and four percussionists, with each group playing wildly different time signatures—some starting slow and speeding up, while others do the opposite. Gundlach explained to the local broadcaster MDR that MAiRA's technical precision made the complex piece sound seamless, "as if it came from a single source."

Aligned with the Orchestra's mission, Director of Robotics and Autonomous Systems at ASTM International, Aaron Prather [posted](#) that the moment marking the 25th anniversary of Dresden Sinfoniker was 'truly a harmonious blend of technology and music'. The event fits into larger causes of concern about AI and artistic agency and quality, as addressed in this CULT-commissioned [report](#) on AI and the Creative Industries. Markus Rindt, artistic director of Dresden's Sinfoniker, [emphasised](#) that the goal is "not to replace human beings" but to tackle intricate compositions beyond the capabilities of human conductors.

It is not the first time that an intelligent robot has been tasked

with conducting an orchestra. Back in [2008](#), a 1.2-meter-tall robot led the Detroit Symphony Orchestra in a performance of Mitch Leigh's The Impossible Dream from Man of La Mancha. In [2017](#), the Italian tenor Andrea Bocelli, along with the Lucca Philharmonic Orchestra, performed in Pisa under the direction of YuMi, a dual-arm robot conductor designed for collaboration. More recently, in [July 2023](#), an android robot took the conductor's podium at Seoul's National Theater of Korea. Nevertheless, this event marks the first time that a robot has conducted beyond human capabilities. The Dresden Symphonic thus continues its legacy of challenging and pushing the boundaries of artistic and musical innovation.

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