

Press Release AISSI

The international Project AISSI is officially starting!

On Tuesday, August 24th, 2021, the international, publicly funded advanced scheduling project AISSI had its official Kick-Off Event in Berlin.

The project AISSI -Autonomous Integrated Scheduling for Semiconductor Industry - proposes to apply deep reinforcement learning to schedule wafer production more efficiently. The main goal is to reduce cycle times and to balance WIP scheduling. By applying reinforcement learning, we will try to optimize the scheduling overall manufacturing processes so that competitors can be outperformed in terms of efficiency and cost effectiveness.

Under the lead of Robert Bosch GmbHs project coordinator Kai Schelthoff, the project brings together a consortium of 5 companies and universities, namely Bosch, Nexperia, KIT, Systema and D-SimLab from Singapore. This collaboration marks the first Eureka research project between German and Singaporean enterprises. The partnership has been made possible through the consortium's participation in the 1st Eureka Clusters Artificial Intelligence Call (2020), organised by the Eureka network. This initiative is a joint funding programme to catalyse co-innovation projects in the Artificial Intelligence domain between 15 participating Eureka member countries and entities from Singapore. The AISSI is one of the supported projects, with the consortium jointly funded by DLR and Enterprise Singapore (Singapore government agency driving enterprise development).

Kai Schelthoff from the Robert GmbH is “[...] really happy to host this event and to coordinate this ambitious project. AISSI contributes to our strategic goal to adapt the usage of AI methodologies in each of our products. It will help not only us, but the entire European semiconductor industry to cope with the immense demand for reliable and high-performing semiconductors in the upcoming years.”

Additionally, **Damla Kilic from DLR-Projektträger** wants to add that “AISSI is an international joint project for the research and further development of semiconductor production for the nations of Singapore and Germany. The project focuses on integrating the approaches of artificial intelligence in order to increase the competitiveness of both business locations. In times of supply crises and a lack of supply, the optimization of the production of semiconductors offers added value for the steadily increasing digitalization of society.”

Ms Anne Ho, Director of Advanced Manufacturing at Enterprise Singapore said, “AISSI is a good example of how Singapore and international companies can come together to develop innovative solutions that meet the industry’s pressing needs. It is also testament to the long-standing economic partnership between Singapore and Germany. Enterprise Singapore hopes to work closely with our counterparts such as DLR to bring about more of such co-innovation partnerships between our enterprises.”

Mr Boon Ping Gan, CEO of D-SIMLAB Technologies added that “This international collaboration provides a great opportunity for D-SIMLAB to further enhance our product and technology offering in Smart Manufacturing. The innovative solution will be test bedded in a production environment to showcase its benefits and offers tremendous values to instill customer confidence, which eventually leads to an industry wide exploitation.”