

Success Story Templates

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Industrial HPC Course



EURO

SUCCESS STORY IN AUTOMOTIVE INDUSTRIAL DOMAIN

COMPANY XY

1. Software Company LTD

THE PROBLEM

Implement a low-cost, low-latency, high accuracy gesture recognition solution that can be deployed on different edge platforms such as the NVIDIA Jetson Nano

SUCCESS STORY DETAILS

HPC provider:HPC Cloud

Domain Expert:Robotics

Country: Bulgaria

Link:

THE HPC PROBLEM DOMAIN

Using a HPC machine also allowed the team to work with much larger datasets that a regular workstation computer would not even be able to load into memory. The final output of this process is an optimised model running inside a NVIDIA docker container that can be directly deployed to an NVIDIA Jetson Nano and can make use of the Jetson Nano's onboard GPGPU processor.

THE SOLUTION

Using novel approaches to the problem: EAVISE - the final implementation is based. As a result, a small footprint neural network was created, which consists of CNN and a multi-stage TCN that allows to work with low-resolution images taken by cheap thermal cameras. This solution was implemented inside the BonsAPPS AIAsset framework, as part of the BonsAPPS challenge. This framework abstracts away the hardware platform on which the AI app runs on allowing us to focus on the AI app instead of hardware specifics.

THE BENEFITS

The Software Company Ltd. was recognized by the BONSAPPS as a reliable partner due to support by our team, resulted in a solution of an important problem using cutting-edge scientific research: implementing HPC technology to improve both the development process and the quality of the final AI application.

SUCCESS STORY IN AUTOMOTIVE INDUSTRIAL DOMAIN x

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