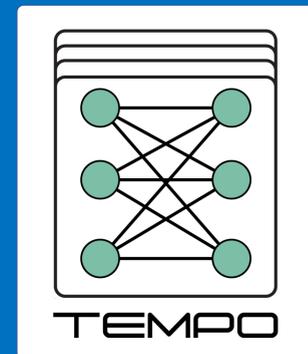


Real-time nutrition assessment through neuromorphic computing



obtain the caloric contents and nutritional values from food plate images

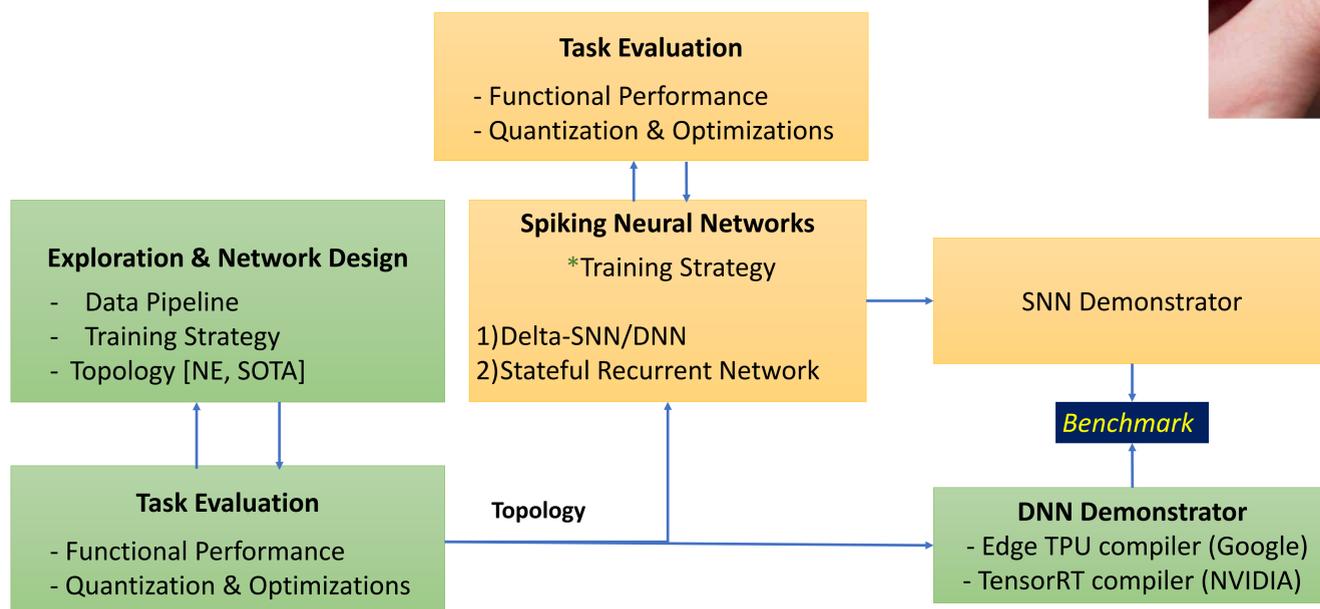


Health

Healthy eating is an important part of healthy living. This demonstrator enables to determine the caloric contents and nutritional values of a food plate from video sequences. This opens the opportunity to analyze your food plate fast and easy with your smartphone. To enable this, we focus on the dynamic power and latency in addition to the nutrition classification based on a deep neural network.

The goal of this activity is to

- demonstrate learning/generalizing ability of the network in performing a challenging multioutput regression task, using vision modality only, in a computationally constraint environment
- evaluate the capabilities of hardware platform being developed withing the TEMPO project



To evaluate the TEMPO technology, the solution is implemented both on a Jetson TX2 and on the SENECA hardware platform developed in TEMPO. This platform integrates a Spiking Neural Network (SNN) on FPGA

Demonstrator partners

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TEMPO

Technologies and hardware for neuromorphic computing

<https://tempo-ecsel.eu/>

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This project has received funding from the ECSEL Joint Undertaking (JU) under grant agreement No 826655. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Belgium, France, Germany, Netherlands, Switzerland

