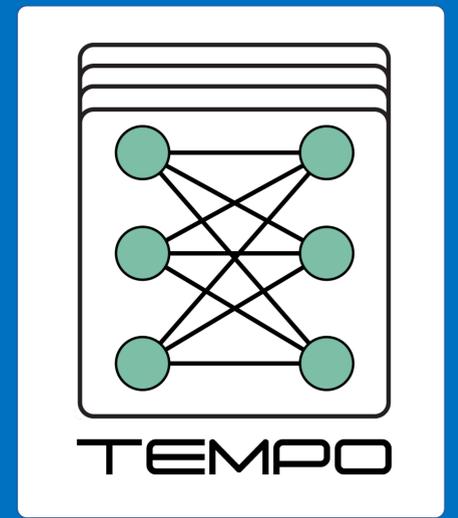


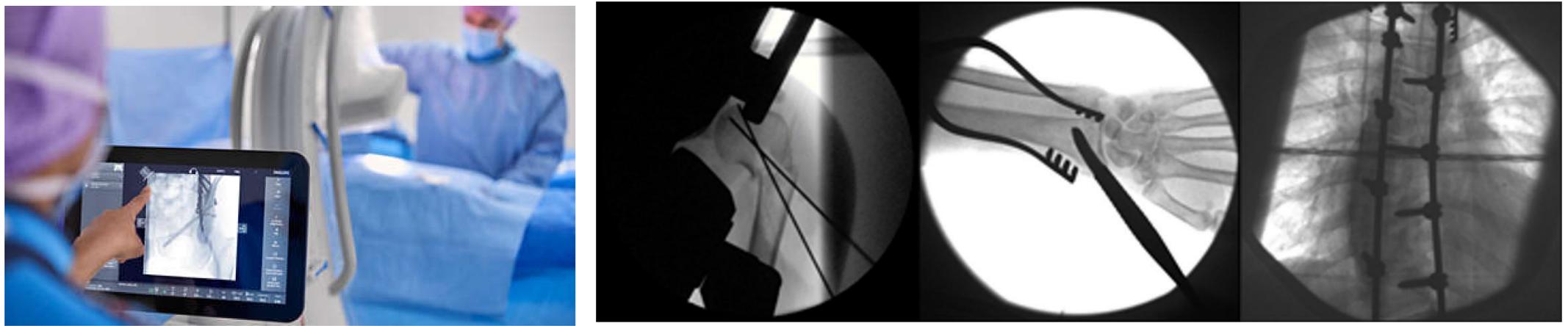
Medical x-ray image denoising through neuromorphic computing

increasing OR efficiency with improved imaging



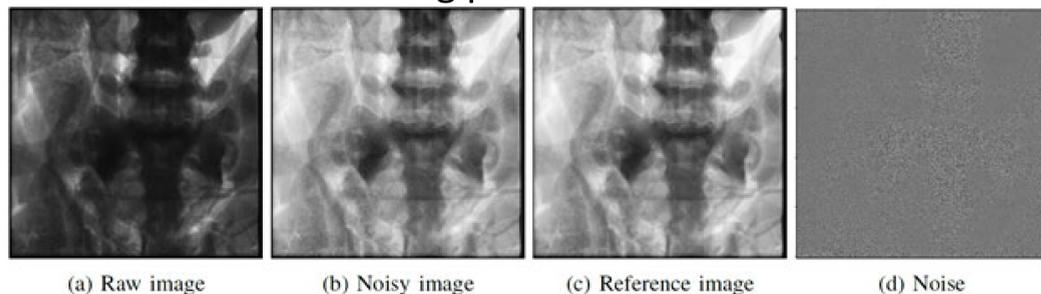
Health

This demonstrator aims to improve real-time, unsupervised, high quality, spatial and temporal denoising of medical x-ray images through deep learning, to achieve increased non-invasive imaging and OR efficiency. Implemented in Philips' Zenition, this technology can be applied in a wide range of clinical application areas.

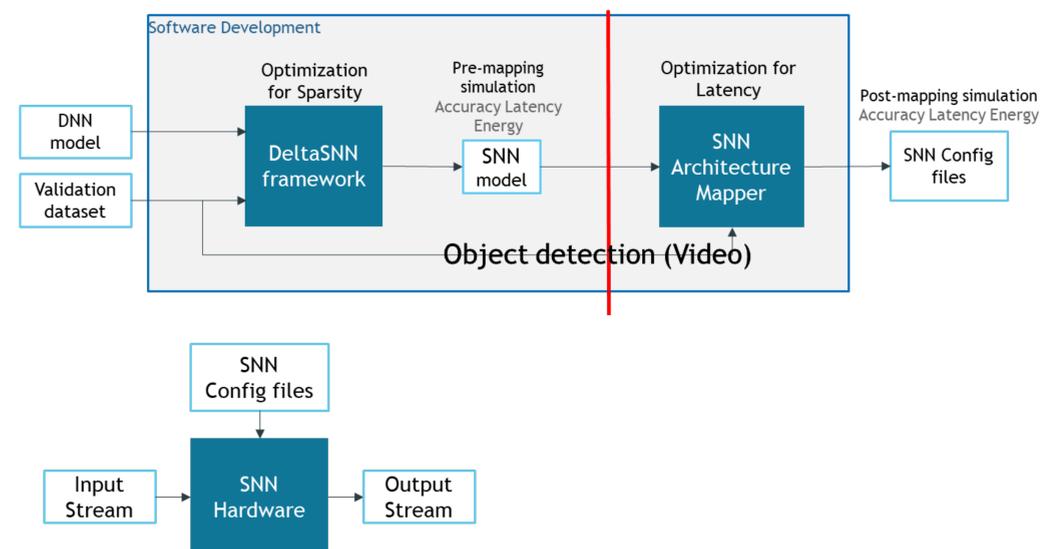


Our ambition is to double the current denoising speed in an unsupervised manner to approach real-time behavior and to build a web app showing ultra-low latency image denoising based on video streams.

State of the art denoising performance:



This demonstrator builds on the SENECA platform developed in TEMPO. This platform integrates a Spiking Neural Network (SNN) on FPGA.



Demonstrator partners

PHILIPS imec

Philips Medical Systems, Philips Research, IMEC-NL
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TEMPO

Technologies and hardware for neuromorphic computing

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

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