

E-Skin - Processing Tactile Information in Autonomous Systems

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The sense of touch is fundamental to safe and effective physical interaction - for humans and autonomous systems alike. We, humans, use the sense of touch to control how we physically interact with our surroundings, with objects, and with other living beings.

Despite the skin's importance for feedback in interactions, few autonomous machines implement an electronic sense of touch.

Recent advancements have improved the deployability and robustness of e-skin systems. The challenge is e-skin systems handling a large amount of multimodal tactile information effectively. Heterogeneous information that an e-skin produces with its large number of distributed sensors.

This talk introduces e-skin, explains challenges and solutions for effective e-skin in autonomous systems, and details an innovative, novelty-driven e-skin system for efficient hardware-independent processing of tactile information.

This talk will not be streamed online and will not be recorded!

