

switt wiss technology transfer association

SMART EYE

(III) Universität Zürich

EID Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

Smart eye encompasses a family of novel sensors which are used e.g. for traffic data acquisition, people counting and industrial automation. The technology underlying the smart eye sensors was developed by Dr. Tobi Delbrück und Dr. Patrick Lichtsteiner at the Institute for Neuroinformatics of the University of Zurich and of ETH Zurich. It was further developed and commercialized in collaboration with the Austrian Institute of Technology.

Smart eye is based on newly developed, bio-inspired CMOS vision chips: signal pre-processing is implemented on each pixel, which significantly reduces data rates and accelerates the entire analysis process. The independently acting pixels enable very high time resolutions, operation across a wide range of brightness and extremely high processing speeds at low costs. Traffic flow acquisition and control at the European football championships in 2008 was one of the first applications of the system.

