NEUJAHRSEMPFANG

des Instituts für Informatik der FSU Jena

Tim Weyrich

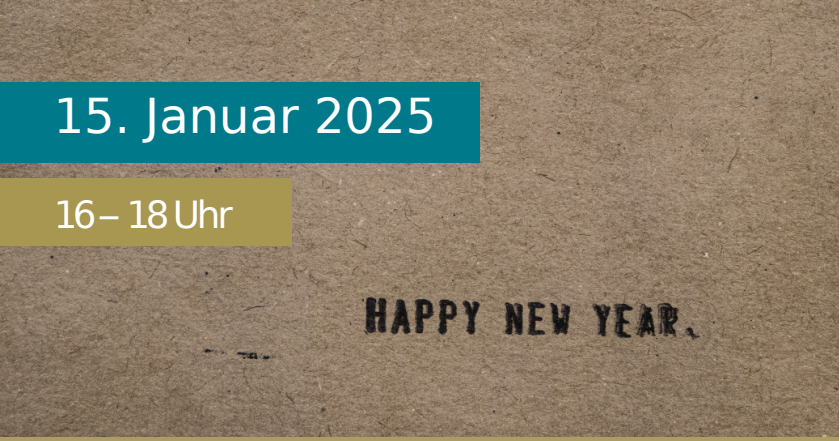
Friedrich-Alexander-Universität Erlangen Nürnberg
Digital Reality Visual Computing Interacting With The Real World

Rosensäle
Fürstengraben 27

15. Januar 2025

16 – 18 Uhr

Vortrag mit
anschließendem Sektempfang



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The increasingly ubiquitous availability of high-quality digital cameras enables low-cost visual capture and digitisation of real-world objects and phenomena; at the same time, physical output devices, from high-definition screens to computer-controlled manufacturing, are becoming commonplace. This development bears the promise of an even tighter integration of computers into traditional workflows, seamlessly transitioning between the physical and the digital realm. In practice, however, technical off-the-shelf solutions are rarely sufficient to enter previously non-computerised domains. Prof. Weyrich's work focuses on developing novel representations, algorithms and workflows to open up visual computing (capture, modelling, manipulation and replication of visual and geometric entities) for novel application domains. This talk presents such bespoke developments in a number of areas, including special-effects, cosmetics, mechanics, sculpture and architecture, as well as cultural-heritage preservation, discussing how through careful analysis of traditional problem domains and workflows visual computing can make a difference in previously unexpected ways.