Roy Damgrave
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Personal profile

I work as an assistant professor at the laboratory of Design, Production and Management, part of the Engineering Technology faculty of the University of Twente. My research and education is mainly focussed on the use of Synthetic Environments and Virtual & Augmented Reality in product development processes.

I'm involved in the bachelor and the master educational program of Industrial Design Engineering and Mechanical Engineering. Next to my courses in these programs, I'm guiding many students in bachelor and master thesis assignments. One of my additional interests are keeping track of new educational approaches and innovation, and try new educational methods in my own courses.

My research aims on realizing an appropriate decision-making support tool to determining when, how and why to use what kind of technology and how to implement it in line with the used methodology in a multi-stakeholder setting. The focus of this research is on enhancing the development of a digital system reference (a.o. digital twins, masters and prototypes) in the Industry 4.0 and Smart Industry context. This is supported by use of IoT, advance manufacturing, virtual dashboards, smart industry testbeds and remote collaboration support. I also manage the 'Virtual Reality and Smart Industry Lab, where much of this research is performed.

Furthermore I'm a Research Affiliates of the International Academy for Production Engineering (CIRP), a member of the Industrial Reality Hub, a member of the EuroXR Association, and also work for the Fraunhofer Project Center at the University of Twente.