

## **Human-machine interaction and display technology in airport security screening**

### **Original title / Originaltitel**

Mensch-Maschine Interaktion und Darstellungstechnologie bei Flughafensicherheitskontrollen

### **Summary / Zusammenfassung**

X-ray screening systems are widely used at airports to examine the contents of passenger bags. Current x-ray equipment provides many image enhancement features such as for example negative image, black and white, edge detection, organic only, organic stripping etc. In this project we examine the value of image enhancement functions to provide sector based guidance for enhancing display technology in x-ray screening. Recently, new systems have been developed which allow displaying bags in 3D or from multiple views. A second aim of this project is to determine the benefit of such 3D and multiple view systems as compared to standard single view screening equipment.

Weitere Informationen unter [www.psychologie.unizh.ch/vicoreg/research/](http://www.psychologie.unizh.ch/vicoreg/research/)

### **Publications / Publikationen**

Michel, S., Koller, S., Ruh, M., & Schwaninger, A. (2006). The effect of image enhancement functions on X-ray detection performance. Proceedings of the 4th International Aviation Security Technology Symposium, Washington, D.C., USA, November 27 – December 1, 2006, 434-439. [PDF]

Weitere Informationen unter [www.psychologie.uzh.ch/vicoreg/publications/index\\_byarea.htm](http://www.psychologie.uzh.ch/vicoreg/publications/index_byarea.htm)

### **Project Leadership and Contacts / Projektleitung und Kontakte**

Dr. Adrian Schwaninger (Project Leader)

### **Other Links to external Webpages / Andere Links zu externen Webseiten**

<http://www.psychologie.unizh.ch/vicoreg/>

### **Funding Source(s) / Unterstützt durch**

EU, Private Sector (e.g. Industry), Others

Max Planck Society (EU Project); Analogic; Zurich State Police

### **Duration of Project / Projektdauer**

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