



# Computer Vision Laboratory

## Funded projects

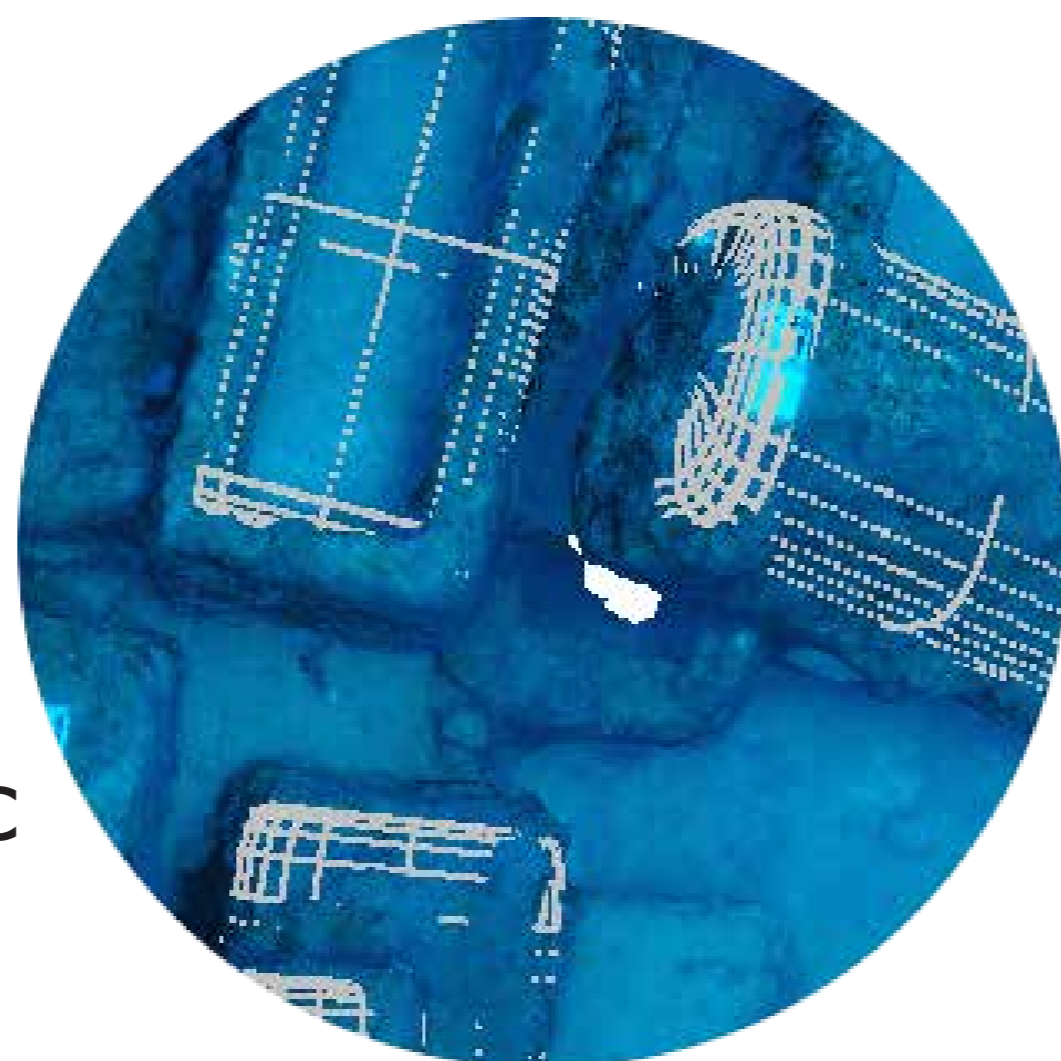
Computer vision, Research programme, 2015-2018  
3D scanning and modeling in archaeology, Magelan group, Ltd., 2011-  
Innovative services for persons with complex communication need, 2013-2015  
Unmanned aerial vehicle for control and surveillance, PKP 2015  
Pilot study of placement and design of cyclists counter, PKP 2015  
Upgrade of corpuses Gigafida, Kres, ccGigafida and ccKres, 2015-2018



AUGMENTED REALITY

## Research area

We research the capture, processing and interpretation of 2D and 3D visual data, machine learning in computer vision, and the use of images in computer-human interactions. We work in the following specific areas: 3D documentation in archaeology and cultural heritage, interpretation of images in biometry, medicine, geology and meteorology, forensic analysis of images and video, virtual and augmented reality, interactive visual signage systems, information visualization, production of computer games and new media art.



ARCHEOLOGY

## Cooperation

Institute for the Protection of Cultural Heritage of Slovenia  
University of Ljubljana  
Faculty of Electrical Engineering  
Faculty of Architecture  
Academy of Fine Arts and Design  
University of Maribor  
Faculty of Electrical Engineering and Computer Science  
University of Nova Gorica  
Research Centre for Humanities  
Slovenia Control, Ltd.  
Comland, Ltd.  
University of the Basque Country, Spain  
Polytechnic College of Donostia-San Sebastián  
University of Las Palmas de Gran Canaria, Spain  
Faculty of Electronic and Telecommunication Engineering  
University of Zagreb, Croatia  
Faculty of Electrical Engineering and Computing  
Faculty of Graphic Arts  
Graz University of Technology, Austria  
Institute for Computer Graphics and Vision  
Ss. Cyril and Methodius University, Macedonia  
Faculty of Computer Science and Engineering  
Istanbul Technical University, Turkey  
Department of Computer Engineering

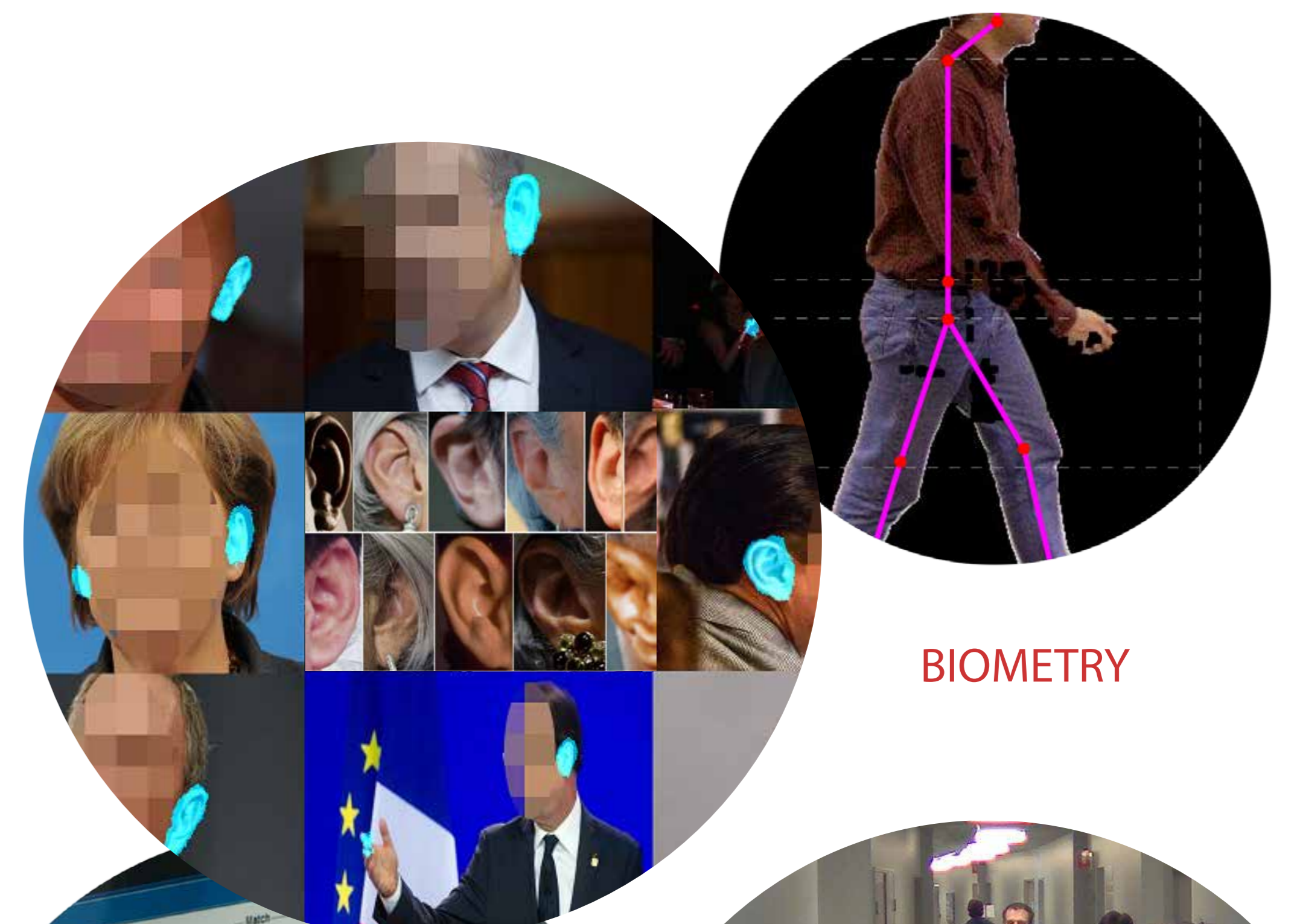
VIRTUAL WORLDS



NEW  
MEDIA  
ART

## Publications

Jaklič et al., "User interface for a better eye contact in videoconferencing", *Displays*, 2017.  
Emeršič et al., "Ear recognition: more than a survey", *Neurocomputing*, 2017.  
Hrastovec et al., "Prediction of aircraft performances based on data collected by air traffic control centers", *Transportation Research*, 2016.  
Jaklič et al., "Automatic digitization of pluviograph strip charts", *Meteorological Applications*, 2016.  
Jaklič et al., "Volumetric models from 3D point clouds: the case study of sarcophagi", *Journal of Archaeological Science*, 2015.  
Batagelj et al., "Image-based biometrics in forensic science", *Journal of Criminal Investigation and Criminology*, 2015.  
Bovcon, "Literary aspects in new media art works", *CLCWeb: Comparative Literature and Culture*, 2014.  
Ravnik et al., "Dynamic anamorphosis as a special, computer-generated user interface", *Interacting with Computers*, 2014.  
Peer et al., "Strategies for exploiting indep. cloud impl. of biometric experts in multibio. scenarios", *Math. Problems in Engineering*, 2014.  
Kovač et al., "Human skeleton model based dynamic feat. for walking speed invariant gait recogn.", *Math. Problems in Engineering*, 2014.



BIOMETRY

