TÜBİTAK

Horizon 2020
Marie Sklodowska Curie Actions
R&D PROFILE FORM

Organization Name / Department	Izmir University Department of Computer Engineering	**Organization Short Name**	IZU
Organization Type	☒ University ☐ Public Research Centre ☐ Large Scale Enterprise ☐ Small and Medium Scale Enterprise	☐ Public Body ☐ International NGO ☐ National NGO	
Research Fields	☐ Chemistry **CHE** ☐ Social and Human Sciences **SOC** ☐ Economic Sciences **ECO** ☒ Information Science and Engineering **ENG** ☐ Environment and Geosciences **ENV** ☐ Life Sciences **LIF** ☐ Mathematics **MAT** ☐ Physics **PHY**	***Sub-Fields / Keywords:*** - Computer Graphics - Rendering - Inverse rendering - Bidirectional Reflectance Distribution Function (BRDF) - Appearance design - Paint composition modeling - Color measurement - Paint models	
Short Description of the Organization / Department	The Computer Engineering Department is well known among nationwide departments with 10 members of faculty, all experts in their fields. The Faculty members affiliated with the Technology Transfer and Research Centre work closely with industry to develop and carry out joint projects. The Department aims to train students in the structures of computer systems, their operation, and design and use to meet the increase in demand. The purpose is to train modern and inquisitive computer engineers keeping up with developments in technology, who know the power of knowledge and its sharing use that knowledge efficiently and help spread the information and technology. Programs concentrates on a number of subjects including theory (mathematical fundamentals and algorithms), hardware, system and computer networks, and software engineering. Graduates of the program will have been equipped with theoretical fundamentals of computer engineering, the knowledge and experience about the system engineering, and the skills to exercise software engineering. The Department offers M.Sc. and Ph.D. degrees in Computer Engineering.		
Previous Related Projects / Research Experience	An Efficient Model for Subsurface Scattering Translucent Materials, *The Scientific and Technical Research Council of Turkey* (TUBITAK), *Project no*. 111E208, 2014. A Copula-based Reflection Model. *The Scientific and Technical Research Council of Turkey* (TUBITAK), *Project no.* 108E007, 2010. CAD Production pipeline (CADPIPE). *Sixth Research Framework Program* (*FP6*), *Project no*. 512897, 2006.		

Short Description of the Project idea (if foreseeable)	A Turkish University is seeking SMEs, Research Institutions and Universities to join a consortium or submit a proposal to H2020-MSCA RISE- 2015 program. The research team has the expertise on computer graphics specifically on surface reflectance; however they require diverse academic expertise and SMEs. The Project aims to conduct research to advance the state-of-the art in appearance design, acquisition and realistic rendering of real world car paints and prediction of their pigment composition through the measured reflectance data. The partners should be able to contribute at least one of the fields of expertise in: • Preparing test samples (e.g. samples containing metallic and interference flake pigments). • Modeling surface reflectance through Bidirectional Reflectance Distribution Function (BRDF), Bidirectional Texture Function (BTF) or Bidirectional Surface Scattering Function(BSSRDF). • Research on modeling and inverse rendering based on appearance design of metallic and pearlescent paints.
Related Call	**H2020-MSCA RISE- 2015**
Contact Person	Prof.Dr. Aydin Ozturk
Position in the Organization	Head, Department of Computer Engineering Director, Technology, Transfer Application and Research Centre
Tel	+90(533)3781216
Email	Aydin.ozturk@izmir.edu.tr