

**Name**

Fabio Bruno

Role

Associate Professor

Short CV

Fabio Bruno is Associate Professor at DIMEG, since 01/01/2012. In 2005 he completed the Ph.D. in Mechanical Engineering at the University of Calabria. Since April 2014 he is the Principal investigator of the project "VISAS - Integrated Enhancement of Underwater Archaeological Sites" funded by Italian Ministry of Education, Universities and Research. He has been in charge of the DIMEG Research Unit in several projects like: "TTACA - Innovative Tools for cultural heritage ArChiving and restorAtion", COMAS "Planned in Situ Preservation of Underwater Archaeological Artifacts", IT@CHA "Italian Technologies for Advanced Applications in Cultural Heritage".

He is cofounder of 2 spin-off companies: 3D Research s.r.l. and Tech4Sea s.r.l.

He is co-author of more than 100 papers refereed papers in international journals and conferences (21 articles on international journals).

Teaching Activities

Professor of Rapid Prototyping (9 credits), Year II, MS in Mechanical Engineering.

Professor of Technical Industrial Design (6 credits), Year I, BS in Chemical Engineering.

Selected Publications

Lagudi A., Bianco G., Muzzupappa M., Bruno F., An alignment method for the integration of underwater 3D data captured by a stereovision system and an acoustic camera. *Sensors (Switzerland)*, Vol. 16, N. 4. 2016

Barbieri L., Bruno F., Cosco F., Muzzupappa M., Effects of device obtrusion and tool-hand misalignment on user performance and stiffness perception in visuo-haptic mixed reality. In *International Journal of Human Computer Studies*, Vol. 72, N. 12, pp. 846–859, 2014.

Bruno F., Angilica A., Cosco F.I., Muzzupappa M., Reliable behaviour simulation of product interface in Mixed Reality. *Engineering with Computers*, Vol. 29, N.3, pp. 375-387, 2013.

Bruno F., Muzzupappa M., Product interface design: A participatory approach based on virtual reality, *International Journal of Human-Computer Studies*, Vol. 68, n. 5, May 2010, pp. 254-269.

Bruno F., Bruno S., De Sensi G., Luchi M.L., Mancuso S., Muzzupappa M., From 3D reconstruction to virtual reality: A complete methodology for digital archaeological exhibition, *Journal of Cultural Heritage*, Vol. 11, n. 1, January-March 2010, Pages 42-49.

Research Lines

- Virtual and Augmented Reality techniques and their application in Industrial Design and Cultural Heritage;
- Underwater 3D reconstruction techniques based on optical systems and their integration with acoustic sensors;
- Underwater mechatronics and robotics with a focus on the development of new tools for the protection of underwater cultural heritage.