

PROFESSOR DR. ENG. FLORICA MOLDOVEANU

PhD coordination in "Computers and Information Technology"

Doctoral School of Automatic Control and Computers,
University POLITEHNICA of Bucharest

Proposed subjects, 2016:

- Innovative solutions based on Virtual, Augmented & Mixed Reality (for: education, medicine, health, entertainment, science, art, etc.; using: 3D real-time environment sensing, body tracking, massive multiuser online, gamification, etc.)
- Real-time generation & rendering of complex and realistic 3D environments
- Unconventional human-computer interfaces & interaction (e.g. audio, haptics, gestures, BCI)
- Computer Vision for visually impaired people
- Maximizing immersion in virtual reality systems
- ICT solutions for visually impaired people (education, entertainment - audio games, wellbeing)
- ICT solutions for the prevention of hospital acquired infections (monitoring, alerting, analysis)

Note: possible paid positions within Sound of Vision project

Synthetic profile:

- **Research areas:** Computer Graphics, Augmented and Virtual Reality, Computer Vision, Computer animation, eHealth, Software Engineering, eLearning, Interoperability standards for eHealth.
- **PhD coordinator since 2000:**
 - **25 finalized PhD theses**
 - **9 undergoing.**
 - Some of the finalized theses can be seen here: <http://graphics.cs.pub.ro/theses/phd>
- **Publications** (see full profile below): over 30 books/chapters, over 200 papers.
- **Recent research projects** (see full profile below):
 - **Sound of Vision:** Natural sense of vision through acoustics and haptics (Horizon 2020, 2015-2018)
 - **HAI-OPS:** Hospital Acquired Infection and Outbreak Prevention System (Eurostars, 2015-2018)
 - **TRAVEE:** Virtual Therapist with Augmented Feedback for Neuro-motor Rehabilitation (PNII, 2014 - 2016)
 - **VISUAL-D:** Visualization of Patient Data for easy management of care processes (Eurostars, 2011-2013)
 - **MORIS FD:** Identification of medical operational risks and fraud detection (Eureka, 2011-2013)
 - **RELIS:** Risk Detection In Laboratory Information Systems (Eurostars, 2010-2012)
 - **SABIMAS:** Advanced Information System, based on medical imaging, for personalized implants in hip arthroplasty (PN II, 2008-2011)
 - **RETEMES:** Reliability Testing of Medical Systems (Eureka, 2008-2010)
- **President/Member of:**
 - President of HL7 Romania (www.hl7romania.ro), since 2006.
 - President of the department of Geographical Informational Systems of ASRO (Romanian Organization for Standardization)
 - Member of the UPB's Scientific Bulletin Editorial Board
 - Member of ACM, IEEE, SRAIT
 - Coauthor of the standard ISO IEEE 11073-20601, 2008: Health informatics - Personal health device communication.

Full profile: https://cs.pub.ro/index.php/people/userprofile/florica_moldoveanu

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