



ADMISSION TO DOCTORAL STUDIES

Session September 2022

Field of doctoral studies: COMPUTERS AND INFORMATION TECHNOLOGY

Doctoral supervisor: POPOVICI DORIN-MIRCEA

TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES

TOPIC 1: *Use of mixed reality multi-modal visualization technologies in music therapy*

Content / Main aspects to be considered:

- Statement/justification/SOA, objectives, methodology, available technology, expected output, timeline (Gantt diagram)

Recommended bibliography:

- Lin, Xiangxu & Mahmud, Saifuddin & Jones, Ethan & Shaker, Alfred & Miskinis, Alena & Kanan, Shadi & Kim, Jong-Hoon. (2020). Virtual Reality-Based Musical Therapy for Mental Health Management. 0948-0952. 10.1109/CCWC47524.2020.9031157.
- R. Kanehira, Y. Ito, M. Suzuki and F. Hideo, "Enhanced relaxation effect of music therapy with VR," *2018 14th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD)*, 2018, pp. 1374-1378, doi: 10.1109/FSKD.2018.8686951.
- Cristian A. Cabezas, Alexander R. Arcos, José L. Carrillo-Medina & Gloria I. Arias-Almeida Effects of Virtual Reality and Music Therapy on Academic Stress Reduction Using a Mobile Application, Conference paper, First Online: 10 February 2022, DOI: 10.1007/978-3-030-96147-3_4
- David Lima, Thais Castro, Music Spectrum: A Music Immersion Virtual Environment for Children with Autism, <https://doi.org/10.1016/j.procs.2012.10.013>, Part of special issue: Proceedings of the 4th International Conference on Software Development for Enhancing Accessibility and Fighting Info-exclusion (DSAI 2012)
- Elena Partesotti, Alicia Peñalba & Jônatas Manzolli, Digital instruments and their uses in music therapy, <https://doi.org/10.1080/08098131.2018.1490919>, Online: 20 Sep 2018
- Alexie Byrns, Hamdi Ben Abdesslem, Marc Cuesta, Marie-Andrée Bruneau, Sylvie Belleville, Claude Frasson, EEG Analysis of the Contribution of Music Therapy and Virtual Reality to the Improvement of Cognition in Alzheimer's Disease, DOI: 10.4236/jbise.2020.138018
- Evangelia Baka, Mike Kentros, George Papagiannakis & Nadia Magnenat-Thalmann, Virtual Reality Rehabilitation Based on Neurologic Music Therapy: A Qualitative Preliminary Clinical Study, Conference paper, First Online: 30 May 2018, DOI: 10.1007/978-3-319-91152-6_9

Prerequisites / Remarks: NA

TOPIC 2: *Multi-Cloud/Hybrid Cloud cybersecurity architectural best practices and strategies*

Content / Main aspects to be considered:

- Statement/justification/SOA, objectives, methodology, available technology, expected output, timeline (Gantt diagram)

Recommended bibliography:

- Tom,Janetscheck & Mustafa Toroman : Mastering Azure Security: Keeping your Microsoft Azure workloads safe, 2nd Edition 978-1803238555
- David Okeyode : Microsoft Azure Security Technologies Certification and Beyond , 978-1800562653
- William Panek , Benjamin Perkins Microsoft Azure Architect Technologies and Design Complete Study Guide 978-1119559535
- Gaurav Raje ,Security and Microservice Architecture on AWS: Architecting and Implementing a Secured, Scalable Solution 1st Edition 978-1098101466
- Marcello Zillo Neto, Gustavo A. A. Santana , Fernando Sapata , Mauricio Munoz , Alexandre M. S. P. Moraes , Thiago Morais ,AWS Certified Security Study Guide: Specialty (SCS-C01) 1st Edition
- Vladimir O. Safonov ,Trustworthy Cloud Computing , 978-1119113508
- Alasdair Gilchrist (Author), Alice Gilchrist ,Google Cloud Platform an Architect's Guide , 978-1691619429
- M.E. Hathaway ,Standards for Cyber Security, 0.3233/978-1-61499-372-8-97
- NIST Special Publication 500-291 , NIST Cloud Computing Standards Roadmap
- Scott Rose , Oliver Borchert ,NIST Special Publication 800-207 , Zero Trust Architecture
- Cloud Security Alliance : Top Threats to Cloud Computing: Egregious Eleven Deep Dive
- Glenn Wilson, A leader’s guide to producing secure software without compromising flow, feedback and continuous improvement , 978-1781335024
- Julien Vehent ,Securing DevOps: Security in the Cloud 1st Edition 978-1617294136
- Gerardus Blokdyk , Cloud Security Posture Management A Complete Guide , 978-0655826729

Prerequisites / Remarks: NA

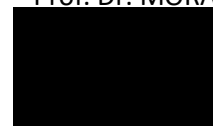
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Signature