Universitatea Transilvania din Brașov
ȘCOALA DOCTORALĂ INTERDISCIPLINARĂ

ADMITERE DOCTORAT Sesiunea Septembrie 2026

Domeniul de doctorat: CALCULATOARE ȘI TEHNOLOGIA INFORMAȚIEI
Conducător de doctorat: POPOVICI DORIN-MIRCEA

TEME (TEMATICI) PENTRU CONCURS

TEMA 1: Utilizarea perspectivelor egocentrice in construirea unui DigitalTwin aplicabil in patrimoniul cultural intangibil
Conținut / Principalele aspecte abordate: ● Pozitia candidatului/justificare/SOA, obiective, metodologie, tehnologie disponibilă, rezultate preconizate, milestones (diagrama Gantt)
Bibliografie recomandată: ● Boboc RG, Băutu E, Gîrbacia F, Popovici N, Popovici DM. Augmented reality in cultural heritage: an overview of the last decade of applications. Applied Sciences. 2022 Sep 30;12(19):9859. ● Boboc RG, Duguleană M, Voinea GD, Postelnicu CC, Popovici DM, Carrozzino M. Mobile augmented reality for cultural heritage: Following the footsteps of Ovid among different locations in Europe. Sustainability. 2019 Feb 22;11(4):1167. ● Neamțu C, Comes R, Popovici DM, Băutu E, Liliana MS, Syrotnik A, Popovici MI. Evaluating user experience in the context of cultural heritage dissemination using extended reality: A case study of the dacian bronze matrix with hollow design. ACM Journal on Computing and Cultural Heritage. 2024 Feb 23;17(2):1-21. ● Lihan Jiang, Yucheng Mao, Linning Xu, Tao Lu, Kerui Ren, Yichen Jin, Xudong Xu, Mulin Yu, Jiangmiao Pang, Feng Zhao, Dahua Lin, and Bo Dai. 2025. AnySplat: Feed-forward 3D Gaussian Splatting from Unconstrained Views. ACM Trans. Graph. 44, 6, Article 257 (December 2025), 16 pages. https://doi.org/10.1145/3763326 ● Bernhard Kerbl, Andreas Meuleman, Georgios Kopanas, Michael Wimmer, Alexandre Lanvin, and George Drettakis. 2024. A Hierarchical 3D Gaussian Representation for Real-Time Rendering of Very Large Datasets. ACM Trans. Graph. 43, 4, Article 62 (July 2024), 15 pages. https://doi.org/10.1145/3658160 ● Bernhard Kerbl, Georgios Kopanas, Thomas Leimkuehler, and George Drettakis. 2023. 3D Gaussian Splatting for Real-Time Radiance Field Rendering. ACM Trans. Graph. 42, 4, Article 139 (August 2023), 14 pages. https://doi.org/10.1145/3592433 ● Muhamad Risqi U. Saputra, Andrew Markham, and Niki Trigoni. 2018. Visual SLAM and Structure from Motion in Dynamic Environments: A Survey. ACM Comput. Surv. 51, 2, Article 37 (March 2019), 36 pages. https://doi.org/10.1145/3177853 ● Erick P. Herrera-Granda, Juan C. Torres-Cantero, Diego H. Peluffo-Ordóñez, Monocular visual SLAM, visual odometry, and structure from motion methods applied to 3D reconstruction: A comprehensive survey, Heliyon, Volume 10, Issue 18, 2024, e37356, ISSN 2405-8440, https://doi.org/10.1016/j.heliyon.2024.e37356

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Note /Precondiții / Obs.: *NU ESTE CAZUL*

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TEMA 2: Gemeni digitali procedurali ghidați de inteligență artificială pentru explorarea patrimoniului cultural imaterial prin narațiuni generative bazate pe text

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TEMA 3: Realitatea augmentată ca mediu de codare: ancorarea spațială a intenției epistemice în lectura multi-document și sinteza trasabilă asistată de inteligență artificială

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Conducător de doctorat,

Prof. dr. POPOVICI DORIN-MIRCEA

Semnătură

Coordonatorul domeniului de doctorat,

Prof. dr. MORARU SORIN

Semnătură