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COSMIC Turkiye 2025 report

COSMIC 2025 Annual Meeting

2026 achievements

1. Tenekeci, S., Ünlü, H., Gül, B. A., Keleş, D., Kücük, M., & Demirörs, O. (2026):

   ‘**Automating software size measurement from python code using language models**’.

   Published in: Automated Software Engineering, 33(1), 19.

2025 achievements

1. Bağrıyanık, S., & Ersoy, E. (2025, September). **Measuring AI Impact on Software Engineering Productivity and Quality.** In 2025 10th International Conference on Computer Science and Engineering (UBMK) (pp. 1187-1192). IEEE.
2. Yürüm, O. R., Ünlü, H., & Demirörs, O. (2025). **An Alternative Software Benchmarking Dataset: Effort Estimation with Machine Learning**. Journal of Systems and Software, 112591.
3. Ünlü, H., Tenekeci, S., Kennouche, D. E., & Demirörs, O. (2025**). Automating software size measurement with language models: Insights from industrial case studies**. Journal of Systems and Software, 112638.
4. Ünlü, H., Yürüm, O. R., Yıldız, A., & Demirörs, O. (2025). **Application of a Size Measurement Standard for Data Warehouse Projects**. Software: Practice and Experience, 55(3), 571-588.

2024 achievements

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1. Ersoy, E., Bagriyanik, S., & Sozer, H. (2024, October). **On the Accuracy of Effort Estimations based on COSMIC Functional Size Measurement: A Case Stud**y. 18th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (pp. 528-537).
2. Ersoy, E., Çallı, E., Erdoğan, B., Bağrıyanık, S., & Sözer, H. (2024). **A longitudinal case study on Nexus transformation: Impact on productivity, quality, and motivation**. Journal of Software: Evolution and Process, 36(5), e2615.
3. Yürüm, O. R., Ünlü, H., & Demirörs, O. (2024, August). **Towards the Construction of a Software Benchmarking Dataset via Systematic Literature Review.** In 2024 50th Euromicro Conference on Software Engineering and Advanced Applications (SEAA) (pp. 194-200). IEEE.
4. Tenekeci, S., Ünlü, H., Dikenelli, E., Selçuk, U., Soylu, G. K., & Demirörs, O. (2024, September). **Predicting software size and effort from code using natural language processing.** Joint 33rd International Workshop on Software Measurement and the 18th International Conference on Software Process and Product Measurement (IWSM-MENSURA 2024), Montréal, Canada (Vol. 3852).
5. Hacaloglu, T., Küçükateş Ömüral, N., Kılınç Soylu, G., & Demirörs, O. (2024, January). **Software Change Size Measurement: An Exploratory Systematic Mapping Study.** In CEUR Workshop Proceedings--Joint of the 33rd International Workshop on Software Measurement and the 18th International Conference on Software Process and Product Measurement, IWSM-MENSURA 2024--30 September-4 October 2024--Montreal--204467.0. CEUR-WS.
6. T Hacaloğlu, H Ünlü, A Yıldız, O Demirörs ***Software Size Measurement: Bridging Research and Practice***, *IEEE Software 41 (3), 49-58*