

## СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

1. Сидоров Н.А. Стилистика программного обеспечения. *Проблеми програмування*. 2018. №2-3. С. 245–254.
2. Сидоров Н.А. Экология программного обеспечения. *Інженерія програмного забезпечення*, 2010. С. 53–61.
3. Сидоров Н.А., Сидорова Н.Н., Сидоров Е.Н. Дескриптивная модель экосистемы стиля программирования. *Проблеми програмування*. 2020. № 2–3. С. 74-80.
4. Сидоров М. О. Программное обеспечение – экологический подход к исследованиям. *Інженерія програмного забезпечення*. 2010. № 1. С. 5-13.
5. Aid to recovery: the economic impact of IT, software, and the Microsoft ecosystem on the global economy. IDC White Paper, 2009, p. 9.
6. Costa, G., Silva, F., Santos, R., Werner, C., and Oliveira, T. (2013). From applications to a software ecosystem platform: *An exploratory study*. In *Proceedings of the Fifth International Conference on Management of Emergent Digital EcoSystems, MEDES '13*, pp. 9–16, New York, NY, USA. ACM.
7. Coutinho E., Viana D. and R. Pereira Dos Santos. An Exploratory Study on the Need for Modeling Software Ecosystems: The Case of SOLAR SECO. *2017 IEEE/ACM 9th International Workshop on Modelling in Software Engineering (MiSE)*, Buenos Aires, 2017, pp. 47-53. DOI: 10.1109/MiSE.2017.3
8. Coutinho, E. F., Santos, I., and Bezerra, C. I. M. (2017). A software ecosystem for a virtual learning environment: Solar seco. In *Proceedings of the Joint 5th International Workshop on Software Engineering for Systems-of-Systems and 11th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems, JSOS '17*, pp. 41–47.
9. David G. Messerschmitt and Clemens Szyperski. *Software Ecosystem: Understanding an Indispensable Technology and Industry*. Cambridge, MA, USA: MIT Press.

10. Deepak Dhungana, Iris Groher, Elisabeth Schludermann, Stefan Biffel. Software Ecosystems vs. Natural Ecosystems: Learning from the Ingenious Mind of Nature. *ECSA '10: Proceedings of the Fourth European Conference on Software Architecture: Companion Volume, August 2010*. Pp. 96–102  
[https://publik.tuwien.ac.at/files/PubDat\\_187570.pdf](https://publik.tuwien.ac.at/files/PubDat_187570.pdf)

11. Eric Yu and Stephanie Deng. Understanding Software Ecosystems: A Strategic Modeling Approach. *Proceedings of the Workshop on Software Ecosystems 2011*, p. 65-76

12. Francisco Victor da S. Pinheiro, Emanuel Ferreira Coutinho, Italo Santos, Carla I. M. Bezerra. A Tool for Supporting the Teaching and Modeling of Software Ecosystems Using SSN Notation. *Journal on Interactive Systems*, 2022, 13:1, DOI: 10.5753/jis.2022.2602.

13. Franco-Bedoya O., Ameller D., Costal D. and Franch X. QuESo a quality model for open source software ecosystems. *9th International Conference on Software Engineering and Applications. (ICSOFT-EA)*, Vienna, Austria, 2014 pp. 209-221.

14. Graciano Neto, V. V., Basso, F., Pereira dos Santos, R., Bakar, N. H., Kassab, M., Werner, C., Oliveira, T., and Nakagawa, E. Y. (2019). Model-driven engineering ecosystems. In *2019 IEEE/ACM 7th International Workshop on Software Engineering for Systems-of-Systems (SESoS) and 13th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems (WDES)*, pp. 58–61

15. H. Sadi M., Yu E. (2015). Designing Software Ecosystems: How Can Modeling Techniques Help?. In: Gaaloul, K., Schmidt, R., Nurcan, S., Guerreiro, S., Ma, Q. (eds) *Enterprise, Business-Process and Information Systems Modeling. BPMDS EMMSAD 2015* 2015. Lecture Notes in Business Information Processing, vol 214. Springer, Cham. <https://cutt.ly/qBpaF3X>

16. Igor R. Alencar, Emanuel F. Coutinho, Leonardo O. Moreira, and Carla I. M. Bezerra. 2020. A Tool for Software Ecosystem Models: An Analysis on their Implications in Education. In *Proceedings of the XXXIV Brazilian Symposium on*

*Software Engineering* (Natal, Brazil) (SBES 2020). ACM, New York, NY, USA, 10 pages.

17. Jan Bosch. 2009. From Software Product Lines to Software Ecosystems. *In Proceedings of the 13th International Software Product Line Conference* (San Francisco, California, USA) (SPLC '09). Carnegie Mellon University, USA, 111–119.

18. K. Manikas and K. M. Hansen. Software ecosystems - a systematic literature review. *Journal of Systems and Software*, vol. 86, no. 5, pp. 1294–1306, 2013.

19. Lehman M. *Software Evolution – Background, Theory, Practice. Integrated Design and Process Technology*. Society for Design and Process Science. 2003. 11 p.

20. Mircea F. Lungu. *Reverse Engineering Software Ecosystems* Doctoral Dissertation – Faculty of Informatics of the Università della Svizzera Italiana 2009. 186 p.

21. Mircea Lungu; Michele Lanza. The small project observatory: a tool for reverse engineering software ecosystems. *2010 ACM/IEEE 32nd International Conference on Software Engineering*, 2-8 May 2010.

22. S. Jansen, A. Finkelstein, and S. Brinkkemper. A sense of community: A research agenda for software ecosystems. *In Software Engineering, 2009. Proceedings. International Conference on*, 2009.

23. Santos, R., Werner, C., Alves, C., Jorge Santos Pinto, M., Cukierman, H., Oliveira, F., and Tania Cohen Egler, T. (2013). *Ecosystemas de Software: Um Novo Espaço para a Construção de Redes e Territórios envolvendo Governo, Sociedade e a Web*, pp. 337–366.

24. Sydorov N. Toward software artifacts ecosystem. *Проблеми програмування*. 2020. № 4. С. 110-120.

25. Sydorov N., Sydorova N., Sydorov E., Cholyskhina O., Batsurovska I. Development of the approach to using a style in software engineering, *Eastern-European Journal of Enterprise Technologies*. 2019. 4/2 (100) Pp. 41–51.

26. Ultra-Large-Scale Systems. The Software Challenge of the Future. SEI. Pittsburgh. June, 2006. 150 p.
27. V. Berk, I. V. Den, S. Jansen, and L. Luinenburg. Software ecosystems: a software ecosystem strategy assessment model. in *Proceedings Of the 4th Software Architecture, European Conference (Ecsa), Companion Volume DBLP, DBLP*, Copenhagen, Denmark, August, 2010.
28. Vasilis Boucharas, Slinger Jansen, and Sjaak Brinkkemper. 2009. Formalizing Software Ecosystem Modeling. In Proceedings of the 1st International Workshop on Open Component Ecosystems (Amsterdam, The Netherlands) (IWOCE '09). Association for Computing Machinery, New York, NY, USA, 41–50.
29. Wouters J., Ritmeester J. R., Carlsen A. W., Jansen S., Wnuk Krzysztof. A SECO meta-model: A common vocabulary of the SECO research domain. *Lecture Notes in Business Information Processing*, Springer , 2019, Vol. 370, p. 31-45.
30. Yu and Stephanie Deng. Understanding Software Ecosystems: A Strategic Modeling Approach. *Proceedings of the Workshop on Software Ecosystems 2011*, p. 65-76
31. Z. Liao, B. Zhao, S. Liu et al. A prediction model of the project life-span in open source software ecosystem. *Mobile Network Application*, vol. 24, no. 4, pp. 1382–1391, 2019.
32. Zhifang Liao, Xiaofei Qi, Yan Zhang, Xiaoping Fan. How to Evaluate the Productivity of Software Ecosystem: A Case Study in GitHub. Hindawi. August 2020; *Scientific Programming*. 2020(12):1-13.