Reference List

- [1] Marco Brambilla, Jordi Cabot, Manuel Wimmer. (2012) Model-Driven Software Engineering in Practise. Morgan & Claypool Publishers.
- [2] Robert France, Bernard Rumpe, Model Driven Development of Complex Software: A Research RoadMap. Future of Software Engineering 2007.
- [3] A brief introduction to model-driven engineering. May 24th 2020. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0123-921X2014000200011.
- [4] Manifesto for Agile Software Development. Retrieved May 11th 2020. http://agileManifesto.org
- [5] Qing He, Beijun Shen, Yuting Chen, Sotware Defect Prediction Using Semi Supervised Learning with Change Burst Information. IEEE Computer Society 2016.
- [6] Wenjing Han, Chung-Horng Lung, Samuel A. Ajila, Empirical Investigation of Code and Process Metrics for Defect Prediction, IEEE Computer Society 2016.
- [7] Kanika Chandra, Gagan Kapoor, Rashi Kohli, Archana Gupta, IMPROVING SOFTWARE QUALITY USING MACHINE LEARNING, 1st International Conference on Innovation and Challenges in Cyber Security 2016.
- [8] Ankita Bansal, Ruchika Malhotra, Kimaya Raje, Analyzing and Assessing the Security-Related Defects, 1st International Conference on Innovation and Challenges in Cyber Security. 2016.
- [9] Puntitra Sawadpong, Toward a Defect Prediction Model of Exception Handling Method Call Structures, ACM SE '14, March 28 - 29 2014.
- [10] Feng Zhang, Ahmed E.Hassan, Shane McIntosh, Ying Zou, The use of Summation to Aggregate Software Metrics Hinders the Performance of Defect Prediction Models. IEEE TRANSACTIONS ON SOFTWARE ENGINEERING, 2016.
- [11] Xiaobing Sun, Xiangyue Liu, Bin Li, Yucong Duan, Hui Yang, Jianjun Hu, Exploring Topic Models in Software Engineering Data Analysis: A Survay, IEEE 2016.
- [12] Chun Shan, Hongjin Zhu, Changzhen Hu, Jin Cui, Jinefeng Xue, Software Defect Prediction Model Based on Improved LLE-SVM. 4th International Conference on Computer Science and Network Technology, 2015.

- [13] Komukai-Toshiba-cho, Saiwai-ku, Kawasaki, Superposed Naïve Bayes for Accurate and Interpretable Prediction, IEEE 14th International Conference on Machine Learning and Applications, 2015.
- [14] Carol Woody, Robert Ellison, William Nichols, Predicting Cybersecurity Using Quality Data, IEEE, 2015.
- [15] Wutthichai Chansuwath, Twittie Senivongse, A Model-Driven Development of Web Applications Using AngularJS Framework. IEEE, 2016.
- [16] OMG, UML Profile. [Online]. Available: http://www.omg.org/mda/specs.htm. Last Accessed: 30 Mar 2016.
- [17] Eric Freeman, Elisabeth Freeman, Kathy Sierra and Bert Bates. Head First Design Patterns, 2004.
- [18] MxGraph. Retrieved May 11th, 2020. <u>https://github.com/jgraph/mxgraph</u>
- [19] Asadullah Shaikh, Overview of Slicing and Feedback Techniques for Efficient Verification of UML/OCL Class Diagrams.
- [20] J.cabot, R Clariso, and D.Riera. Verification of uml/ocl class diagrams using constraint programming. In ASE 2007, pages 547-548. ACM 2007.
- [21] The ECLiPSe Constraint Programming System. <u>http://www.ecipseclp.org/</u>, Mar 2007, version 5.10. Last checked on January 11, 2018.
- [22] Object Management Group (OMG). Object Constraint Language. Retrieved May 11th, 2020. <u>http://www.omg.org/spec/ocl</u>.
- [23] Object management Group (OMG). Unified Modelling Lanuguage homepage 2018. Retrieved May 11th 2020. <u>http://www.omg.org</u>.
- [24] Shamsul Huda, Sultan Alyahya, MD Mohsin Ali, Shafiq Ahmed, Jemal Abawajy, Hmood Al Dossari, John Yearwood. A Framework for Software Defect Prediction and Metric selection.
- [25] L. Pelayo and S.Dick, "Applying novel resampling strategies to software defect prediction" in Proc. Annu. Meeting North Amer. Fuzzy Inf. Process. Soc (NAFIPS), Jan. 2007, pp. 69-72.
- [26] H.B Yadav and D. K Yadav, "A Fussy logic based approach for phase wise software defects prediction using software metrices." Inf. Softw. Tech-nol., vol 63, pp. 44-57. Jul. 2015.

- [27] T.Bages, "An essay towards solving a problem in the doctrine of changes." Philos, Trans, Roy. Soc. London, no 53, pp. 370-418, 1763. [Online]. Available: http://www.sta.ucls.edu/history/essay.pdf
- [28] N. Cristianini and J.Shawe-Taylor, An Introduction to Support Vector Machines and Other Kernel-Based Learning Methods. New York, NY, USA: Cambridge Univ. Press 2000
- [29] J.R. Quinlan, "Induction of decision trees," Mach. Learn., vol. 1, no0 1, pp. 81-106, Mar. 1986.
- [30] B. Krose and P.V.D Smagt, An Introduction toNeural Networks. Amsterdam, The Netherlands: Univ. Amsterdam, 1993.
- [31] J. A. Rodger, "Toward reducing failure risk in an integrated vehicle health maintenance system: A fuzzy multi-sensor data fusion Kalman filter approach for IVHMS," Expert Syst. Appl., vol. 39, no. 10, pp. 9821-9836, Aug. 2012.
- [32] F. Aparisi and J.Sanz, "Interpreting the out-of-control signals of multi-variate control charts employing neural networks,". Int. J. Comput., Electl, Autom., Control Inf. Eng., vol. 4, no. 1, pp. 24-28, 2010.
- [33] A. A Asad and I. Alsmadi, "Evaluating the impact of software metrices on defects prediction. Part 2," Comput. Sci. J. Moldova, vol. 22, no. 1, pp. 127-144, 2014.
- [34] R. Malhotra, "A systematic review of machine learning techniques for software fault prediction," Appl. Soft Comput., vol. 27, pp. 504-518, Feb. 2015.
- [35] H. Zhang, "An investigation of the relationships between lines of code and the defects." In Proc. IEEE Int. Conf. Softw. Maintenance (ICSM), Sep. 2009, pp. 274-283.
- [36] L. Yu and A. Mishra, "Experience predicting fault-prone software modules using complexity metrices" Quality Technolol. Quantitative Manage., vol. 9, no. 4, pp. 421-433, May 2012. http://web.it.nctu.edu.tw/~qtqm/qtqmpaers/2012V9N4/2012_F7.pdf
- [37] Feng Zhang and Audris Mockus and Iman Keivanloo and Ying Zou, Towards Building a Universal Defect Prediction Model, 2014.
- [38] J. Nam, S. J. Pan, and S. Kim. Transfer defect learning. In Proceedings of the 35th International Conference on Software Engineering, pages 382–391, 2013
- [39] F. Zhang, A. Mockus, Y. Zou, F. Khomh, and A. E.Hassan. How does context affect the distribution of software maintainability metrics? In Proceedings of the 29th IEEE International Conference on Software Maintainability, pages 350 – 359, 2013.

- [40] N. Ohlsson and H. Alberg, "Predicting fault-prone software modules in telephone switches," IEEE Trans. Softw. Eng., vol. 22, no. 12,pp. 886–894, Dec. 1996
- [41] R. Malhotra, "A systematic review of machine learning techniques for software fault prediction," Appl. Soft Comput., vol. 27, pp. 504–518, Feb. 2015.
- [42] S. R. Chidamber and C. F. Kemerer, "A metrics suite for object oriented design," IEEE Trans. Softw. Eng., vol. 20, no. 6, pp. 476–493, Jun. 1994.
- [43] T. T. Nguyen, T. N. Nguyen, and T. M. Phuong. Topic-based defect prediction (nier track). In Proceedings of the 33rd International Conference on Software Engineering, ICSE '11, pages 932–935, New York, NY, USA, 2011. ACM.
- [44] D. Andrzejewski, A. Mulhern, B. Liblit, and X. Zhu.Statistical debugging using latent topic models. In Proceedings of the 18th European Conference on Machine Learning, pages 6–17, 2007
- [45] T.-H. Chen, S. W. Thomas, M. Nagappan, and A. E.Hassan. Explaining software defects using topic models. In Proceedings of the 9th IEEE Working Conference on Mining Software Repositories, pages 189–198, 2012.
- [46] W. Hu and K. Wong. Using citation influence to predict software defects. In Proceedings of the 10th Working Conference on Mining Software Repositories, MSR '13, pages 419–428, Piscataway, NJ, USA, 2013. IEEE Press.
- [47] P. Sawadpong, E. B. Allen, and B. J. Williams. Exception handling defects: An empirical study. In IEEE 14th International Symposium on High-Assurance Systems Engineering, pages 90–97, 2012
- [48] B. G. Ryder. Constructing the call graph of a program. IEEE Transactions on Software Engineering, SE-5(3):216–226, May 1979.
- [49] C. Marinescu. Are the classes that use exceptions defect prone? In Proceedings of the 12th International Workshop on Principles of Software Evolution and the 7th annual ERCIMWorkshop on Software Evolution, pages 56–60. ACM, 2011.
- [50] L. Briand, S. Morasca, and V. Basili. Property-based software engineering measurement. IEEE Transactions on Software Engineering, 22(1):68–86, 1996
- [51] T. M. Khoshgoftaar and E. B. Allen. Logistic regression modeling of software quality. International Journal of Reliability, Quality & Safety Engineering, 6(4):303–317, 1999
- [52] Yucong Duan, Qiang Duan, Ruisheng Shi, Honghao Gao, Toward an Automated View Abstraction for Distributed Model-Driven Service Development. IEEE International Conference on Services Computing, 2016