

Appendix A: Secondary Studies Included

Table .1: Selected Secondary Studies

Study ID	Year	Source Type	Review Type	Search Method	% of GL
SC2468	2018	J	SLR	A	12.9
MS-EASE-158	2016	C	SLR	A	4.5
SC443	2015	J	SLR	A	2.3
SC465	2016	J	SLR	A + M	6.5
MS-IST-797	2015	J	SLR	A + S	12.6
SC2340	2018	J	MS	A	4.4
MS-IST-534	2015	J	MS	A + M + S	7.8
SC67	2015	J	SLR	A	19.0
MS-IST-598	2017	J	SLR	A	23.8
MS-TSE-535	2017	J	Others	A	5.3
MS-JSS-890	2017	J	Others	A + M + S	12.4
MS-TSE-481	2016	J	SLR	A	2.5
SC6555	2018	J	MS	A + M	1.3
SC3398	2018	J	SLR	A + M	3.6
SD274	2015	J	SLR	A + M	13.8
MS-IST-815	2015	J	SLR	A + M	0
MS-JSS-776	2015	J	SLR	A + S	25.9
MS-IST-407	2015	J	SLR	A	2.3
MS-IST-543	2017	J	SLR	A + M	20.4
SC3386	2018	J	SLR	A + M + S	6.3
SC542	2016	J	SLR	A + S	1.6
MS-JSS-1513	2015	J	MS	A + M + S	10.1
SC3464	2018	J	MS	A + M + S	7.5
MS-JSS-1477	2016	J	MS	A	2.5
MS-JSS-661	2015	J	MS	A	68.4
MS-IST-816	2015	J	SLR	A + M + S	22.6
MS-IST-652	2015	J	MS	A	6.9
MS-IST-355	2015	J	MS	A + M	6.7
MS-IST-749	2017	J	SLR	A + S	3.1
MS-IST-807	2015	J	SLR	A + M	2.3
MS-ESE-286	2017	J	SLR	A	20.0
MS-IST-608	2015	J	SLR	A + M	0
MS-ESE-141	2015	J	MS	A	4.0
SC2329	2018	J	MLR	A	41.7
SC3080	2018	C	SLR	A + S	100
MS-IST-726	2015	J	SLR	A + M	8.6
MS-EASE-97	2014	C	SLR	A + M	5.6

Source Type: J – Journal; C – Conference.

Review Type: SLR – Systematic Literature Review; MLR – Multivocal Literature Review;

MS – Mapping Study; GL – Grey Literature

Search Method: A – Automatic; M – Manual; S - Snowballing.

Table .1: Selected Secondary Studies

Study ID	Year	Source Type	Review Type	Search Method	% of GL
ACM347	2014	J	MS	A + M	7.1
MS-IST-519	2014	J	SLR	A + M + S	1.5
MS-JSS-1323	2017	J	SLR	A + S	3.3
SC653	2016	J	SLR	A	10.0
MS-EASE-170	2016	C	SLR	A + S	100
MS-JSS-396	2016	J	SLR	A	5.8
SC2845	2018	J	SLR	A + S	1.9
MS-IST-375	2014	J	MS	A	4.2
MS-JSS-900	2017	J	Others	A + M	100
NETO-2019-S1	2017	C	GL	A	100
MS-JSS-1229	2014	J	SLR	A	2.2
SC1799	2018	J	SLR	A + S	30.1
MS-IST-541	2014	J	SLR	A + M + S	8.2
MS-TSE-303	2014	J	SLR	A + M + S	4.5
MS-IST-214	2017	J	MS	A + S	5.6
MS-IST-624	2014	J	MS	A + M + S	7.7
MS-IST-757	2016	J	MS	A + S	0
SC2433	2018	J	SLR	A	2.6
SC1873	2018	J	SLR	A + S	63.2
MS-IST-462	2014	J	SLR	A + S	3.2
MS-ESE-190	2014	J	SLR	A + M	45.9
SC2622	2018	J	Others	A + S	7.7
MS-IST-370	2014	J	MS	A	4.8
MS-ESEM-238	2014	J	MS	A + S	4.4
MS-JSS-349	2016	J	MS	A	36.0
SC470	2013	C	MS	A + M + S	1.6
SC221	2016	C	MS	A + M + S	7.5
SC3363	2018	J	SLR	A + S	0
MS-JSS-463	2017	J	MS	A + S	7.9
MS-JSS-1279	2013	J	MLR	A	39.1
MS-IST-321	2017	J	MS	A + S	7.5
MS-IST-522	2013	J	MS	A + M	1.8
MS-IST-582	2013	J	MS	A + M	12.3
MS-IST-688	2013	J	SLR	A + S	5.0
MS-JSS-1527	2018	J	SLR	A + S	4.8
SC2603	2018	J	SLR	A + M	9.7
MS-JSS-784	2013	J	SLR	A + S	8.5
MS-IST-680	2013	J	SLR	A + M	0
MS-IST-331	2017	J	MS	A + M	11.5

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Table .1: Selected Secondary Studies

Study ID	Year	Source Type	Review Type	Search Method	% of GL
MS-IST-675	2013	J	SLR	A + S	15.1
MS-JSS-167	2016	J	MS	A + M	16.7
MS-IST-343	2017	J	MS	A + S	3.7
MS-ESE-337	2017	J	MS	A + S	7.6
MS-EASE-22	2012	C	MS	A	27.6
MS-TSE-538	2017	J	SLR	A + S	1.8
SC2905	2018	J	SLR	A	13.9
MS-IST-419	2012	J	SLR	A + S	2.7
MS-IST-288	2012	J	SLR	A + M	18.9
MS-IST-193	2012	J	SLR	A	6.1
SC2312	2018	J	SLR	A + S	0.9
SC7064	2018	J	MS	A	0
SC166	2012	J	SLR	A	17.9
SC3282	2018	J	MLR	A + S	80.1
MS-JSS-108	2016	J	MS	A	3.6
MS-JSS-683	2017	J	SLR	A + S	2.1
MS-IST-574	2012	J	SLR	A	3.6
MS-EASE-47	2012	C	SLR	A + S	0
MS-IST-711	2012	J	SLR	A	13.8
MS-EASE-40	2012	C	SLR	A + M	0
SC2601	2018	J	MS	A + M + S	7.4
MS-IST-354	2017	J	MLR	A	28.2
SC2922	2018	J	MLR	A + S	73.0
SC3100	2018	C	Others	M	12.5
MS-IST-476	2017	J	SLR	A	7.1
MS-JSS-622	2016	J	SLR	A	4.2
SC1168	2016	J	SLR	A + S	0.8
MS-ESEM-72	2012	J	Others	A	9.1
MS-JSS-1224	2017	J	MS	A + M + S	0.3
MS-IST-754	2016	J	SLR	A	5.7
MS-IST-246	2011	J	MS	A + S	4.4
MS-ESEM-07	2011	J	MS	A + M	15.4
SD288	2011	J	SLR	A + M	1.0
SC91	2011	J	SLR	A + M	5.0
MS-EASE-02	2011	C	MS	A + M + S	8.8
MS-EASE-194	2016	C	MLR	A	28.2
SC5968	2018	J	GL	A	100
IEEE63	2011	C	SLR	A	12.5
MS-JSS-437	2011	J	Others	A + S	18.8

Source Type: J – Journal; C – Conference.

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Table .1: Selected Secondary Studies

Study ID	Year	Source Type	Review Type	Search Method	% of GL
MS-TSE-16	2011	J	SLR	A	6.8
MS-JSS-695	2011	J	SLR	A	13.9
MS-JSS-728	2017	J	MS	A	40.8
MS-EASE-12	2011	C	SLR	A + M	2.9
MS-TSE-09	2011	J	SLR	A + M + S	3.8
MS-IST-632	2011	J	MS	A + M	6.1
SC2965	2018	C	GL	A	100
CRUZES-2011-S22	2010	J	MS	A + M + S	31.6
CRUZES-2011-S46	2010	J	SLR	A	1.4
CRUZES-2011-S33	2010	J	MS	A + M + S	2.5
MS-IST-353	2016	J	MLR	A	66.7

Source Type: J – Journal; C – Conference.

Review Type: SLR – Systematic Literature Review; MLR – Multivocal Literature Review;

MS – Mapping Study; GL – Grey Literature

Search Method: A – Automatic; M – Manual; S - Snowballing.

Secondary Studies References

Secondary Studies

- [SC2622] R. Özakinci, A. Tarhan, Early software defect prediction: A systematic map and review, *Journal of Systems and Software* 144 (October 2017) (2018) 216–239. doi:10.1016/j.jss.2018.06.025.
- [SC3464] J. M. Sierra, A. Vizcaíno, M. Genero, M. Piattini, A systematic mapping study about socio-technical congruence, *Information and Software Technology* 94 (September) (2018) 111–129. doi:10.1016/j.infsof.2017.10.004.
- [MS-IST-608] A. Nguyen-duc, D. S. Cruzes, R. Conradi, The impact of global dispersion on coordination , team performance and software quality – A systematic literature review 57 (2015) 277–294. doi:10.1016/j.infsof.2014.06.002.
- [SC2965] A. Williams, Using reasoning markers to select the more rigorous software practitioners’ online content when searching for grey literature, *ACM International Conference Proceeding Series Part F1377* (2018). doi:10.1145/3210459.3210464.
- [MS-IST-370] O. S. Gómez, N. Juristo, S. Vegas, Understanding replication of experiments in software engineering: A classification, *Information and Software Technology* 56 (8) (2014) 1033–1048. doi:10.1016/j.infsof.2014.04.004.
- [SC3100] P. R. C. Rolando, O. Dieste, R. F. C. Efraín, N. Juristo, Statistical errors in software engineering experiments: A preliminary literature review, *Proceedings - International Conference on Software Engineering* (2018) 1195–1206doi:10.1145/3180155.3180161.

- [SC1168] M. Szvetits, U. Zdun, Systematic literature review of the objectives, techniques, kinds, and architectures of models at runtime, *Software and Systems Modeling* 15 (1) (2016) 31–69. doi:10.1007/s10270-013-0394-9.
- [MS-JSS-1477] S. Zein, N. Salleh, J. Grundy, A systematic mapping study of mobile application testing techniques, *Journal of Systems and Software* 117 (2016) 334–356.
- [SC2845] M. Salam, S. U. Khan, Challenges in the development of green and sustainable software for software multisourcing vendors: Findings from a systematic literature review and industrial survey, *Journal of Software: Evolution and Process* 30 (8) (2018) 19–22. doi:10.1002/smr.1939.
- [MS-JSS-622] A. Idri, M. Hosni, A. Abran, Systematic literature review of ensemble effort estimation, *Journal of Systems and Software* 118 (2016) 151–175.
- [SC3386] P. Heck, A. Zaidman, A systematic literature review on quality criteria for agile requirements specifications, *Software Quality Journal* 26 (1) (2018) 127–160. doi:10.1007/s11219-016-9336-4.
- [MS-IST-797] S. Tiwari, A. Gupta, A systematic literature review of use case specifications research, *Information and Software Technology* 67 (2015) 128–158. doi:10.1016/j.infsof.2015.06.004.
- [SC7064] M. Kalenda, P. Hyna, B. Rossi, Scaling agile in large organizations: Practices, challenges, and success factors, *Journal of Software: Evolution and Process* 30 (10) (2018) 1–24. doi:10.1002/smr.1954.
- [MS-IST-343] L. Garcés, A. Ampatzoglou, P. Avgeriou, E. Y. Nakagawa, Quality attributes and quality models for ambient assisted living software systems: A systematic mapping, *Information and Software Technology* 82 (2017) 121–138. doi:10.1016/j.infsof.2016.10.005.
- [SC2340] K. Patel, R. M. Hierons, A mapping study on testing non-testable systems, *Software Quality Journal* 26 (4) (2018) 1373–1413. doi:10.1007/s11219-017-9392-4.
- [SC542] T. Tahir, G. Rasool, C. Gencel, A systematic literature review on software measurement programs, *Information and Software Technology* 73 (2016) 101–121. doi:10.1016/j.infsof.2016.01.014.
- [MS-JSS-108] A. Ahmad, M. A. Babar, Software architectures for robotic systems: A systematic mapping study, *Journal of Systems and Software* 122 (2016) 16–39. doi:10.1016/j.jss.2016.08.039.
- [SC653] I. M. del Águila, J. del Sagrado, Bayesian networks for enhancement of requirements engineering: a literature review, *Requirements Engineering* 21 (4) (2016) 461–480. doi:10.1007/s00766-015-0225-3.
- [MS-IST-757] P. A. Souza Neto, G. Vargas-Solar, U. S. Da Costa, M. A. Musicante, Designing service-based applications in the presence of non-functional properties: A mapping study, *Information and Software Technology* 69 (2016) 84–105. doi:10.1016/j.infsof.2015.09.004.
- [MS-ESE-141] U. Abelein, B. Paech, Understanding the Influence of User Participation and Involvement on System Success – a Systematic Mapping Study, *Empirical Software Engineering* 20 (1) (2013) 28–81. doi:10.1007/s10664-013-9278-4.

- [MS-IST-726] F. Selleri Silva, F. S. F. Soares, A. L. Peres, I. M. D. Azevedo, A. P. L. Vasconcelos, F. K. Kamei, S. R. D. L. Meira, Using CMMI together with agile software development: A systematic review, *Information and Software Technology* 58 (2015) 20–43. doi:10.1016/j.infsof.2014.09.012.
- [SC2312] B. Wang, R. Peng, Y. Li, H. Lai, Z. Wang, Requirements traceability technologies and technology transfer decision support: A systematic review, *Journal of Systems and Software* 146 (2018) 59–79. doi:10.1016/j.jss.2018.09.001.
- [SC470] M. Kuhrmann, D. M. Fernández, M. Tiessler, A mapping study on method engineering - First results, *ACM International Conference Proceeding Series* (2013) 165–170doi:10.1145/2460999.2461023.
- [MS-JSS-1224] M. Soualhia, F. Khomh, S. Tahar, Task Scheduling in Big Data Platforms: A Systematic Literature Review, *Journal of Systems and Software* 134 (2017) 170–189. doi:10.1016/j.jss.2017.09.001.
- [MS-JSS-1323] F. J. Vasconcellos, G. B. Landre, J. A. O. Cunha, J. L. Oliveira, R. A. Ferreira, A. M. Vincenzi, Approaches to strategic alignment of software process improvement: A systematic literature review, *Journal of Systems and Software* 123 (2017) 45–63. doi:10.1016/j.jss.2016.09.030.
- [SC2603] B. Uzun, B. Tekinerdogan, Model-driven architecture based testing: A systematic literature review, *Information and Software Technology* 102 (July 2017) (2018) 30–48. doi:10.1016/j.infsof.2018.05.004.
- [MS-IST-688] K. Rīņķevičs, R. Torkar, Equality in cumulative voting: A systematic review with an improvement proposal, *Information and Software Technology* 55 (2) (2013) 267–287. doi:10.1016/j.infsof.2012.08.004.
- [MS-ESE-190] O. Al-Baik, J. Miller, The kanban approach, between agility and leanness: a systematic review, *Empirical Software Engineering* 20 (6) (2015) 1861–1897. doi:10.1007/s10664-014-9340-x.
- [MS-TSE-535] W. Martin, F. Sarro, Y. Jia, Y. Zhang, M. Harman, A survey of app store analysis for software engineering, *IEEE Transactions on Software Engineering* 43 (9) (2017) 817–847. doi:10.1109/TSE.2016.2630689.
- [SC3282] V. Garousi, B. Küçük, Smells in software test code: A survey of knowledge in industry and academia, *Journal of Systems and Software* 138 (2018) 52–81. doi:10.1016/j.jss.2017.12.013.
- [MS-JSS-349] B. Costa, P. F. Pires, F. C. Delicato, P. Merson, Evaluating REST architectures - Approach, tooling and guidelines, *Journal of Systems and Software* 112 (2016) 156–180. doi:10.1016/j.jss.2015.09.039.
- [MS-JSS-776] G. Lewis, P. Lago, Architectural tactics for cyber-foraging: Results of a systematic literature review, *Journal of Systems and Software* 107 (2015) 158–186.
- [MS-JSS-728] N. Kratzke, P. C. Quint, Understanding cloud-native applications after 10 years of cloud computing - A systematic mapping study, *Journal of Systems and Software* 126 (2017) 1–16. doi:10.1016/j.jss.2017.01.001.

- [SC2922] S. Maro, J. P. Steghöfer, M. Staron, Software traceability in the automotive domain: Challenges and solutions, *Journal of Systems and Software* 141 (2018) 85–110. doi:10.1016/j.jss.2018.03.060.
- [SC6555] T. Sharma, D. Spinellis, A survey on software smells, *Journal of Systems and Software* 138 (2018) 158–173. doi:10.1016/j.jss.2017.12.034.
- [SC2468] S. Shahrivar, S. Elahi, A. Hassanzadeh, G. Montazer, A business model for commercial open source software: A systematic literature review, *Information and Software Technology* 103 (December 2017) (2018) 202–214. doi:10.1016/j.infsof.2018.06.018.
- [SC1873] S. Hosseinzadeh, S. Rauti, S. Laurén, J. M. Mäkelä, J. Holvitie, S. Hyrynsalmi, V. Leppänen, Diversification and obfuscation techniques for software security: A systematic literature review, *Information and Software Technology* 104 (July) (2018) 72–93. doi:10.1016/j.infsof.2018.07.007.
- [SC5968] J. Soldani, D. A. Tamburri, W. J. Van Den Heuvel, The pains and gains of microservices: A Systematic grey literature review, *Journal of Systems and Software* 146 (2018) 215–232. doi:10.1016/j.jss.2018.09.082.
- [MS-IST-675] D. Radjenović, M. Heričko, R. Torkar, A. Živković, Software fault prediction metrics: A systematic literature review, *Information and Software Technology* 55 (8) (2013) 1397–1418. doi:10.1016/j.infsof.2013.02.009.
- [MS-EASE-194] V. Garousi, M. Felderer, M. V. Mäntylä, The need for multivocal literature reviews in software engineering: Complementing systematic literature reviews with grey literature, *ACM International Conference Proceeding Series* 01-03-June (2016). doi:10.1145/2915970.2916008.
- [MS-JSS-167] J. Axelsson, M. Skoglund, Quality assurance in software ecosystems: A systematic literature mapping and research agenda, *Journal of Systems and Software* 114 (2016) 69–81. doi:10.1016/j.jss.2015.12.020.
- [SC2329] N. Tripathi, E. Klotins, R. Prikladnicki, M. Oivo, L. B. Pompermaier, A. S. Kudakacheril, M. Unterkalmsteiner, K. Liukkunen, T. Gorschek, An anatomy of requirements engineering in software startups using multi-vocal literature and case survey, *Journal of Systems and Software* 146 (2018) 130–151. doi:10.1016/j.jss.2018.08.059.
- [SC465] D. Haselberger, A literature-based framework of performance-related leadership interactions in ICT project teams, *Information and Software Technology* 70 (2016) 1–17. doi:10.1016/j.infsof.2015.09.003.
- [MS-IST-354] V. Garousi, M. Felderer, T. Hacaloglu, Software test maturity assessment and test process improvement: A multivocal literature review, *Information and Software Technology* 85 (2017) 16–42. doi:10.1016/j.infsof.2017.01.001.
- [MS-IST-624] M. Oriol, J. Marco, X. Franch, Quality models for web services: A systematic mapping, *Information and Software Technology* 56 (10) (2014) 1167–1182. doi:10.1016/j.infsof.2014.03.012.

- [ACM347] J. E. González, N. Juristo, S. Vegas, A systematic mapping study on testing technique experiments: Has the situation changed since 2000?, *International Symposium on Empirical Software Engineering and Measurement* (2014) 3–6doi:10.1145/2652524.2652569.
- [MS-JSS-900] S. Matalonga, F. Rodrigues, G. H. Travassos, Characterizing testing methods for context-aware software systems: Results from a quasi-systematic literature review, *Journal of Systems and Software* 131 (2017) 1–21. doi:10.1016/j.jss.2017.05.048.
- [MS-IST-534] R. E. Lopez-Herrejon, L. Linsbauer, A. Egyed, A systematic mapping study of search-based software engineering for software product lines, *Information and Software Technology* 61 (2015) 33–51. doi:10.1016/j.infsof.2015.01.008.
- [MS-IST-321] T. N. Ferreira, S. R. Vergilio, J. T. de Souza, Incorporating user preferences in search-based software engineering: A systematic mapping study, *Information and Software Technology* 90 (2017) 55–69.
- [CRUZES-2011-S22] L. B. Lisboa, V. C. Garcia, D. Lucrédio, E. S. de Almeida, S. R. de Lemos Meira, R. P. de Mattos Fortes, A systematic review of domain analysis tools, *Information and Software Technology* 52 (1) (2010) 1–13.
- [CRUZES-2011-S33] R. Rabiser, P. Grünbacher, D. Dhungana, Requirements for product derivation support: Results from a systematic literature review and an expert survey, *Information and Software Technology* 52 (3) (2010) 324–346. doi:10.1016/j.infsof.2009.11.001.
- [CRUZES-2011-S46] M. Turner, B. Kitchenham, P. Brereton, S. Charters, D. Budgen, Does the technology acceptance model predict actual use? A systematic literature review, *Information and Software Technology* 52 (5) (2010) 463–479. doi:10.1016/j.infsof.2009.11.005.
- [IEEE63] M. Sulayman, E. Mendes, An extended systematic review of software process improvement in small and medium web companies, *IET Seminar Digest 2011* (1) (2011) 134–143. doi:10.1049/ic.2011.0017.
- [MS-EASE-158] B. K. Olorisade, E. De Quincey, P. Andras, P. Brereton, A critical analysis of studies that address the use of text mining for citation screening in systematic reviews, *ACM International Conference Proceeding Series 01-03-June-2016* (2016). doi:10.1145/2915970.2915982.
- [MS-IST-355] V. Garousi, Y. Amannejad, A. B. Can, Software test-code engineering: A systematic mapping, *Information and Software Technology* 58 (2015) 123–147. doi:10.1016/j.infsof.2014.06.009.
- [MS-IST-543] S. Mahdavi-Hezavehi, V. H. Durelli, D. Weyns, P. Avgeriou, A systematic literature review on methods that handle multiple quality attributes in architecture-based self-adaptive systems, *Information and Software Technology* 90 (2017) 1–26. doi:10.1016/j.infsof.2017.03.013.
- [MS-IST-815] E. Tüzün, B. Tekinerdogan, Analyzing impact of experience curve on ROI in the software product line adoption process, *Information and Software Technology* 59 (2015) 136–148. doi:10.1016/j.infsof.2014.09.008.

- [MS-JSS-1513] J. Zhi, V. Garousi-Yusifoglu, B. Sun, G. Garousi, S. Shahnewaz, G. Ruhe, Cost, benefits and quality of software development documentation: A systematic mapping, *Journal of Systems and Software* 99 (2015) 175–198. doi:10.1016/j.jss.2014.09.042.
- [MS-EASE-12] L. Major, T. Kyriacou, O. P. Brereton, Systematic literature review: Teaching novices programming using robots, *IET Seminar Digest* 2011 (1) (2011) 21–30. doi:10.1049/ic.2011.0003.
- [MS-EASE-22] S. T. Acuña, J. W. Castro, O. Dieste, N. Juristo, A systematic mapping study on the open source software development process, *IET Seminar Digest* 2012 (1) (2012) 42–46. doi:10.1049/ic.2012.0005.
- [MS-EASE-40] J. Li, H. Zhang, L. Zhu, R. Jeffery, Q. Wang, M. Li, Preliminary results of a systematic review on requirements evolution, *IET Seminar Digest* 2012 (1) (2012) 12–21. doi:10.1049/ic.2012.0002.
- [MS-EASE-47] M. Riaz, Maintainability prediction of relational database-driven applications: A systematic review, *IET Seminar Digest* 2012 (1) (2012) 263–272. doi:10.1049/ic.2012.0034.
- [MS-ESEM-07] E. Barreiros, A. Almeida, J. Saraiva, S. Soares, A systematic mapping study on software engineering testbeds, *International Symposium on Empirical Software Engineering and Measurement* (2011) 107–116doi:10.1109/esem.2011.19.
- [MS-ESEM-238] D. M. Fernández, S. Ognawala, S. Wagner, M. Daneva, Where do we stand in requirements engineering improvement today?: First results from a mapping study, *International Symposium on Empirical Software Engineering and Measurement* (c) (2014). arXiv:1701.05497, doi:10.1145/2652524.2652555.
- [MS-ESEM-72] M. A. P. Araújo, V. F. Monteiro, G. H. Travassos, Towards a model to support in silico studies of software evolution, *International Symposium on Empirical Software Engineering and Measurement* (2012) 281–289doi:10.1145/2372251.2372303.
- [MS-IST-193] H. P. Breivold, I. Crnkovic, M. Larsson, A systematic review of software architecture evolution research, *Information and Software Technology* 54 (1) (2012) 16–40. doi:10.1016/j.infsof.2011.06.002.
- [MS-IST-214] D. Carrizo, O. Dieste, N. Juristo, Contextual attributes impacting the effectiveness of requirements elicitation Techniques: Mapping theoretical and empirical research, *Information and Software Technology* 92 (2017) 194–221. doi:10.1016/j.infsof.2017.08.003.
- [MS-IST-246] P. A. Da Mota Silveira Neto, I. D. Carmo MacHado, J. D. McGregor, E. S. De Almeida, S. R. De Lemos Meira, A systematic mapping study of software product lines testing, *Information and Software Technology* 53 (5) (2011) 407–423. doi:10.1016/j.infsof.2010.12.003.
- [MS-IST-288] E. Domínguez, B. Pérez, Á. L. Rubio, M. A. Zapata, A systematic review of code generation proposals from state machine specifications, *Information and Software Technology* 54 (10) (2012) 1045–1066. doi:10.1016/j.infsof.2012.04.008.
- [MS-IST-331] O. Franco-Bedoya, D. Ameller, D. Costal, X. Franch, Open source software ecosystems: A Systematic mapping, *Information and Software Technology* 91 (2003) (2017) 160–185. doi:10.1016/j.infsof.2017.07.007.

- [MS-IST-353] V. Garousi, M. V. Mäntylä, When and what to automate in software testing? A multi-vocal literature review, *Information and Software Technology* 76 (2016) 92–117. doi:10.1016/j.infsof.2016.04.015.
- [MS-IST-375] C. A. González, J. Cabot, Formal verification of static software models in MDE: A systematic review, *Information and Software Technology* 56 (8) (2014) 821–838. doi:10.1016/j.infsof.2014.03.003.
- [MS-IST-419] G. Holl, P. Grünbacher, R. Rabiser, A systematic review and an expert survey on capabilities supporting multi product lines, *Information and Software Technology* 54 (8) (2012) 828–852. doi:10.1016/j.infsof.2012.02.002.
- [MS-IST-462] U. Kanewala, J. M. Bieman, Testing scientific software: A systematic literature review, *Information and Software Technology* 56 (10) (2014) 1219–1232. arXiv:1804.01954, doi:10.1016/j.infsof.2014.05.006.
- [MS-IST-476] A. A. Khan, J. Keung, M. Niazi, S. Hussain, A. Ahmad, Systematic literature review and empirical investigation of barriers to process improvement in global software development: Client–vendor perspective, *Information and Software Technology* 87 (2017) 180–205. doi:10.1016/j.infsof.2017.03.006.
- [MS-IST-519] M. Leitner, S. Rinderle-Ma, A systematic review on security in Process-Aware Information Systems - Constitution, challenges, and future directions, *Information and Software Technology* 56 (3) (2014) 273–293. doi:10.1016/j.infsof.2013.12.004.
- [MS-IST-541] I. D. C. Machado, J. D. McGregor, Y. C. Cavalcanti, E. S. De Almeida, On strategies for testing software product lines: A systematic literature review, *Information and Software Technology* 56 (10) (2014) 1183–1199. doi:10.1016/j.infsof.2014.04.002.
- [MS-IST-574] A. L. Mesquida, A. Mas, E. Amengual, J. A. Calvo-Manzano, IT service management process improvement based on ISO/IEC 15504: A systematic review, *Information and Software Technology* 54 (3) (2012) 239–247. doi:10.1016/j.infsof.2011.11.002.
- [MS-IST-632] M. Palacios, J. García-Fanjul, J. Tuya, Testing in Service Oriented Architectures with dynamic binding: A mapping study, *Information and Software Technology* 53 (3) (2011) 171–189. doi:10.1016/j.infsof.2010.11.014.
- [MS-IST-680] D. Rattan, R. Bhatia, M. Singh, Software clone detection: A systematic review, Vol. 55, Elsevier B.V., 2013. doi:10.1016/j.infsof.2013.01.008.
- [MS-IST-711] I. Santiago, Á. Jiménez, J. M. Vara, V. De Castro, V. A. Bollati, E. Marcos, Model-Driven Engineering as a new landscape for traceability management: A systematic literature review, *Information and Software Technology* 54 (12) (2012) 1340–1356. doi:10.1016/j.infsof.2012.07.008.
- [MS-IST-807] D. Tosi, S. Morasca, Supporting the semi-automatic semantic annotation of web services: A systematic literature review, *Information and Software Technology* 61 (2015) 16–32. doi:10.1016/j.infsof.2015.01.007.

- [MS-JSS-1229] D. Ståhl, J. Bosch, Modeling continuous integration practice differences in industry software development, *Journal of Systems and Software* 87 (1) (2014) 48–59. doi:10.1016/j.jss.2013.08.032.
- [MS-JSS-1279] E. Tom, A. Aurum, R. Vidgen, An exploration of technical debt, *Journal of Systems and Software* 86 (6) (2013) 1498–1516. doi:10.1016/j.jss.2012.12.052.
- [MS-JSS-1527] T. Besker, A. Martini, J. Bosch, Managing architectural technical debt: A unified model and systematic literature review, *Journal of Systems and Software* 135 (2018) 1–16. doi:10.1016/j.jss.2017.09.025.
- [MS-JSS-396] K. Dikert, M. Paasivaara, C. Lassenius, Challenges and success factors for large-scale agile transformations: A systematic literature review, *Journal of Systems and Software* 119 (2016) 87–108. doi:10.1016/j.jss.2016.06.013.
- [MS-JSS-437] M. J. Escalona, J. J. Gutierrez, M. Mejías, G. Aragón, I. Ramos, J. Torres, F. J. Domínguez, An overview on test generation from functional requirements, *Journal of Systems and Software* 84 (8) (2011) 1379–1393. doi:10.1016/j.jss.2011.03.051.
- [MS-JSS-463] C. Fernández-Sánchez, J. Garbajosa, A. Yagüe, J. Perez, Identification and analysis of the elements required to manage technical debt by means of a systematic mapping study, *Journal of Systems and Software* 124 (2017) 22–38. doi:10.1016/j.jss.2016.10.018.
- [MS-JSS-695] S. U. Khan, M. Niazi, R. Ahmad, Factors influencing clients in the selection of offshore software outsourcing vendors: An exploratory study using a systematic literature review, *Journal of Systems and Software* 84 (4) (2011) 686–699. doi:10.1016/j.jss.2010.12.010.
- [MS-JSS-784] Z. Li, H. Zhang, L. O’Brien, R. Cai, S. Flint, On evaluating commercial Cloud services: A systematic review, *Journal of Systems and Software* 86 (9) (2013) 2371–2393. arXiv:1708.01412, doi:10.1016/j.jss.2013.04.021.
- [MS-TSE-09] O. Dieste, N. Juristo, Systematic review and aggregation of empirical studies on elicitation techniques, *IEEE Transactions on Software Engineering* 37 (2) (2011) 283–304. doi:10.1109/TSE.2010.33.
- [MS-TSE-16] N. Salleh, E. Mendes, J. C. Grundy, Empirical studies of pair programming for CS/SE teaching in higher education: A systematic literature review, *IEEE Transactions on Software Engineering* 37 (4) (2011) 509–525. doi:10.1109/TSE.2010.59.
- [MS-TSE-303] L. Madeyski, W. Orzeszyna, R. Torkar, M. Jozala, Overcoming the equivalent mutant problem: A systematic literature review and a comparative experiment of second order mutation, *IEEE Transactions on Software Engineering* 40 (1) (2014) 23–42. doi:10.1109/TSE.2013.44.
- [MS-TSE-538] N. S. M. Yusop, J. Grundy, R. Vasa, Reporting Usability Defects: A Systematic Literature Review, *IEEE Transactions on Software Engineering* 43 (9) (2017) 848–867. doi:10.1109/TSE.2016.2638427.
- [NETO-2019-S1] P. Raulamo-Jurvanen, M. Mäntylä, V. Garousi, Choosing the right test automation tool: A grey literature review of practitioner sources, *ACM International Conference Proceeding Series Part F128635* (2017) 21–30. doi:10.1145/3084226.3084252.

- [SC166] M. El-Attar, J. Miller, Constructing high quality use case models: A systematic review of current practices, *Requirements Engineering* 17 (3) (2012) 187–201. doi:10.1007/s00766-011-0135-y.
- [SC2905] G. Rodríguez-Pérez, G. Robles, J. M. González-Barahona, Reproducibility and credibility in empirical software engineering: A case study based on a systematic literature review of the use of the SZZ algorithm, *Information and Software Technology* 99 (March) (2018) 164–176. doi:10.1016/j.infsof.2018.03.009.
- [SC3080] L. Ochoa, T. Degueule, J. Vinju, An empirical evaluation of OSGi dependencies best practices in the eclipse IDE, *Proceedings - International Conference on Software Engineering* (2018) 170–180doi:10.1145/3196398.3196416.
- [SC3363] B. Morschheuser, L. Hassan, K. Werder, J. Hamari, How to design gamification? A method for engineering gamified software, *Information and Software Technology* 95 (April 2017) (2018) 219–237. doi:10.1016/j.infsof.2017.10.015.
- [SC91] T. Yue, L. C. Briand, Y. Labiche, A systematic review of transformation approaches between user requirements and analysis models, *Requirements Engineering* 16 (2) (2011) 75–99. doi:10.1007/s00766-010-0111-y.
- [SD288] L. Chen, M. Ali Babar, A systematic review of evaluation of variability management approaches in software product lines, *Information and Software Technology* 53 (4) (2011) 344–362. doi:10.1016/j.infsof.2010.12.006.
- [MS-IST-749] R. A. Silva, S. d. R. Senger de Souza, P. S. Lopes de Souza, A systematic review on search based mutation testing, *Information and Software Technology* 81 (2017) 19–35. doi:10.1016/j.infsof.2016.01.017.
- [MS-TSE-481] S. Segura, G. Fraser, A. B. Sanchez, A. Ruiz-Cortes, A Survey on Metamorphic Testing, *IEEE Transactions on Software Engineering* 42 (9) (2016) 805–824. doi:10.1109/TSE.2016.2532875.
- [SC3398] E. Gonçalves, J. Castro, J. Araújo, T. Heineck, A Systematic Literature Review of iStar extensions, *Journal of Systems and Software* 137 (2018) 1–33. doi:10.1016/j.jss.2017.11.023.
- [MS-IST-407] D. Heaton, J. C. Carver, Claims about the use of software engineering practices in science: A systematic literature review, *Information and Software Technology* 67 (2015) 207–219. doi:10.1016/j.infsof.2015.07.011.
- [MS-JSS-890] K. Mao, L. Capra, M. Harman, Y. Jia, A survey of the use of crowd-sourcing in software engineering, *Journal of Systems and Software* 126 (2017) 57–84. doi:10.1016/j.jss.2016.09.015.
- [MS-EASE-97] D. Salah, R. F. Paige, P. Cairns, A systematic literature review for Agile development processes and user centred design integration, *ACM International Conference Proceeding Series* (2014). doi:10.1145/2601248.2601276.
- [SC221] V. Cosentino, J. Luis, C. Izquierdo, J. Cabot, Findings from GitHub: Methods, datasets and limitations, *Proceedings - 13th Working Conference on Mining Software Repositories, MSR 2016* (2016) 137–141doi:10.1145/2901739.2901776.

- [MS-IST-754] A. B. Soomro, N. Salleh, E. Mendes, J. Grundy, G. Burch, A. Nordin, The effect of software engineers' personality traits on team climate and performance: A Systematic Literature Review, *Information and Software Technology* 73 (2016) 52–65. doi:10.1016/j.infsof.2016.01.006.
- [MS-IST-652] O. Pedreira, F. García, N. Brisaboa, M. Piattini, Gamification in software engineering - A systematic mapping, *Information and Software Technology* 57 (1) (2015) 157–168. doi:10.1016/j.infsof.2014.08.007.
- [SC2433] V. Anu, W. Hu, J. C. Carver, G. S. Walia, G. Bradshaw, Development of a human error taxonomy for software requirements: A systematic literature review, *Information and Software Technology* 103 (May) (2018) 112–124. doi:10.1016/j.infsof.2018.06.011.
- [MS-ESE-286] D. Ståhl, K. Hallén, J. Bosch, Achieving traceability in large scale continuous integration and delivery deployment, usage and validation of the eiffel framework, *Empirical Software Engineering* 22 (3) (2017) 967–995. doi:10.1007/s10664-016-9457-1.
- [SC2601] V. Berg, J. Birkeland, A. Nguyen-Duc, I. O. Pappas, L. Jaccheri, Software startup engineering: A systematic mapping study, *Journal of Systems and Software* 144 (February) (2018) 255–274. doi:10.1016/j.jss.2018.06.043.
- [MS-IST-816] E. Tüzün, B. Tekinerdogan, M. E. Kalender, S. Bilgen, Empirical evaluation of a decision support model for adopting software product line engineering, *Information and Software Technology* 60 (2015) 77–101. doi:10.1016/j.infsof.2014.12.007.
- [MS-JSS-661] J. Kabbedijk, C. P. Bezemer, S. Jansen, A. Zaidman, Defining multi-tenancy: A systematic mapping study on the academic and the industrial perspective, *Journal of Systems and Software* 100 (2015) 139–148. doi:10.1016/j.jss.2014.10.034.
- [MS-IST-522] Z. Li, P. Liang, P. Avgeriou, Application of knowledge-based approaches in software architecture: A systematic mapping study, *Information and Software Technology* 55 (5) (2013) 777–794. doi:10.1016/j.infsof.2012.11.005.
- [MS-ESE-337] W. K. Assunção, R. E. Lopez-Herrejon, L. Linsbauer, S. R. Vergilio, A. Egyed, Reengineering legacy applications into software product lines: a systematic mapping, *Empirical Software Engineering* 22 (6) (2017) 2972–3016. doi:10.1007/s10664-017-9499-z.
- [MS-IST-582] B. Mohabbati, M. Asadi, D. Gašević, M. Hatala, H. A. Müller, Combining service-orientation and software product line engineering: A systematic mapping study, *Information and Software Technology* 55 (11) (2013) 1845–1859. doi:10.1016/j.infsof.2013.05.006.
- [SD274] M. Zarour, A. Abran, J. M. Desharnais, A. Alarifi, An investigation into the best practices for the successful design and implementation of lightweight software process assessment methods: A systematic literature review, *Journal of Systems and Software* 101 (2015) 180–192. doi:10.1016/j.jss.2014.11.041.
- [MS-IST-598] S. Nadal, V. Herrero, O. Romero, A. Abelló, X. Franch, S. Vansummeren, D. Valerio, A software reference architecture for semantic-aware Big Data systems, *Information and Software Technology* 90 (2017) 75–92. doi:10.1016/j.infsof.2017.06.001.

- [MS-EASE-170] M. Irshad, R. Torkar, K. Petersen, W. Afzal, Capturing cost avoidance through reuse: Systematic literature review and industrial evaluation, *ACM International Conference Proceeding Series* 01-03-June (2016). doi:10.1145/2915970.2915989.
- [SC1799] F. D. Giraldo, S. España, Ó. Pastor, W. J. Giraldo, Considerations about quality in model-driven engineering: Current state and challenges, *Software Quality Journal* 26 (2) (2018) 685–750. doi:10.1007/s11219-016-9350-6.
- [SC443] B. Ulziit, Z. A. Warraich, C. Gencel, K. Petersen, A conceptual framework of challenges and solutions for managing global software maintenance, *Journal of Software: Evolution and Process* 27 (10) (2015) 763–792. arXiv:<https://onlinelibrary.wiley.com/doi/pdf/10.1002/smr.1720>, doi:10.1002/smr.1720.
- [SC67] B. Rizvi, E. Bagheri, D. Gasevic, A systematic review of distributed agile software engineering, *J. Softw. Evol. Process* 27 (10) (2015) 723–762. doi:10.1002/smr.1718.
- [MS-EASE-02] J. F. Bastos, P. A. da Mota Silveira Neto, E. S. de Almeida, S. R. de Lemos Meira, Adopting software product lines: A systematic mapping study, in: *15th Annual Conference on Evaluation Assessment in Software Engineering (EASE 2011)*, 2011, pp. 11–20.
- [MS-JSS-683] L. Kaur, A. Mishra, Software component and the semantic web: An in-depth content analysis and integration history, *Journal of Systems and Software* 125 (2017) 152 – 169. doi:<https://doi.org/10.1016/j.jss.2016.11.028>.