

Full list of publications

Journal Articles

Laukkanen, Eero, Juha Itkonen, and Casper Lassenius. 2017. "Problems, Causes and Solutions When Adopting Continuous delivery—A Systematic Literature Review." *Information and Software Technology* 82 (February): 55–79. doi:10.1016/j.infsof.2016.10.001. (Open access [link](#))

Itkonen, J., M. V. Mäntylä, and C. Lassenius. 2016. "Test Better by Exploring: Harnessing Human Skills and Knowledge." *IEE Software* 33 (4): 90–96. doi:10.1109/MS.2015.85. (preprint [PDF](#))

Lehtinen, T. O. A., Itkonen, J., Lassenius, C., 2016. "Recurring opinions or productive improvements—what agile teams actually discuss in retrospectives", *Empirical Software Engineering*, In press. doi: 10.1007/s10664-016-9464-2 ([link to open access](#))

Lehtinen, Timo O. A., Mika V. Mäntylä, Juha Itkonen, and Jari Vanhanen. 2015. "Diagrams or Structural Lists in Software Project Retrospectives – An Experimental Comparison", *Journal of Systems and Software* 103 (May): 17–35. doi:10.1016/j.jss.2015.01.020. ([link to publisher's site](#))

Leppänen, Marko, Simo Mäkinen, Veli-Pekka Eloranta, Juha Itkonen, Mika V. Mäntylä, and Tomi Männistö. 2015. "The Highways and Country Roads to Continuous Deployment", *IEEE Software*, 32(2): 64-72. doi:10.1109/MS.2015.50 ([link to publisher's site](#))

Kupiainen, Eetu, Mika V. Mäntylä, and Juha Itkonen. 2015. "Using Metrics in Agile and Lean Software Development – A Systematic Literature Review of Industrial Studies." *Information and Software Technology* 62 (June): 143–63. doi:10.1016/j.infsof.2015.02.005. ([link to publisher's site](#))

Afzal, W., Ghazi, N., Itkonen, J., Torkar, R., Andrews, A. Bhatti, K., 2014. "An Experiment on the Effectiveness and Efficiency of Exploratory Testing", *Empirical Software Engineering*. 20 (3): 844-878. DOI:10.1007/s10664-014-9301-4. ([link to publisher's site](#))

Itkonen, Juha, and Mika V. Mäntylä. 2014. "Are Test Cases Needed? Replicated Comparison between Exploratory and Test-Case-Based Software Testing", *Empirical Software Engineering* 19 (2): 303–42. doi:10.1007/s10664-013-9266-8. ([link to publisher's site](#))

Mäntylä, M. V. and Itkonen J., 2014. "How Are Software Defects Found? The Role of Implicit Defect Detection, Individual Responsibility, Documents, and Knowledge", *Information and Software Technology*, vol. 56, issue 12, pp. 1597–1612. doi:10.1016/j.infsof.2013.12.005 ([link to publisher's site](#))

Lehtinen, T. O. A., Mäntylä, M. V., Vanhanen, J., Itkonen, J., Lassenius, C., 2014. "Perceived Causes of Software Project Failures - An Analysis of their Relationships", *Information and Software Technology*, vol. 56, issue 6, pp. 623-643. doi:10.1016/j.infsof.2014.01.015 ([link to publisher's site](#))

Itkonen, J., Mäntylä, M.V. & Lassenius, C., 2013. "The Role of the Tester's Knowledge in Exploratory Software Testing", *IEE Transactions on Software Engineering*, 39(5), pp.707–724. doi:10.1109/TSE.2012.55 ([link to publisher's site](#))

Mäntylä M. V. and Itkonen J., 2013. "More testers – The effect of crowd size and time restriction in software testing", *Information and Software Technology*, vol. 55(6), pp. 986–1003. doi:10.1016/j.infsof.2012.12.004 ([link to publisher's site](#)) ([details and pdf](#))

Mäntylä, M. V., Itkonen, J., Iivonen, J., 2012. "Who Tested My Software? Testing as an Organizationally Cross-Cutting Activity", *Software Quality Journal*, vol. 20(1), pp. 145-172. doi:10.1007/s11219-011-9157-4 ([link open access](#))

Itkonen, J., K. Rautiainen and C. Lassenius, 2005. "Toward an Understanding of Quality Assurance in Agile Software Development", in *International Journal of Agile Manufacturing*, vol. 8(2), pp. 39-49.

Articles in Conference Proceedings

Juha Itkonen, Raoul Udd, Casper Lassenius, and Timo Lehtonen. 2016. "Perceived Benefits of Adopting Continuous Delivery Practices." In *Proceedings of 10th International Symposium on Empirical Software Engineering and Measurement*. Ciudad Real, Spain.

Eero Laukkanen, Timo O. A. Lehtinen, Juha Itkonen, Maria Paasivaara, and Casper Lassenius. 2016. "Bottom-up Adoption of Continuous Delivery in a Stage-Gate Managed Software Organization." In *Proceedings of 10th International Symposium on Empirical Software Engineering and Measurement*. Ciudad Real, Spain.

Lehtinen, Timo O.A., Risto Virtanen, Ville T. Heikkilä, and Juha Itkonen. 2015. "Why the Development Outcome Does Not Meet the Product Owners' Expectations?" In *Agile Processes in Software Engineering and Extreme Programming (XP2015)*, Lecture Notes in Business Information Processing, vol 212, pp. 93-104.

Leppänen, Marko, Simo Mäkinen, Juha Itkonen, Jesse Yli-Huumo, and Timo Lehtonen. 2015. "Decision-Making Framework for Refactoring." In *IEEE 7th International Workshop on Managing Technical Debt (MTD)*, pp. 61–68.

Huhtanen, Timo, Juha Itkonen, and Casper Lassenius. 2015. "Combining Algebraic and Domain Testing to Design Adequate Test Cases for Signal Processing Algorithms." In *Proceedings of the 8th IEEE International Conference on Software Testing, Verification and Validation*. Accepted.

Dingsøyr, Torgeir, Tor Erlend Fægri, and Juha Itkonen. 2014. "What Is Large in Large-Scale? A Taxonomy of Scale for Agile Software Development." In *Product-Focused Software Process Improvement*, edited by Andreas Jedlitschka, Pasi Kuvaja, Marco Kuhrmann, Tomi Männistö, Jürgen Münch, and Mikko Raatikainen, 273–76. Lecture Notes in Computer Science 8892. Springer International Publishing. ([link to publisher's site](#))

Kupiainen, E., Mäntylä M. V., Itkonen J., " [Why are industrial agile teams using metrics and how do they use them?](#) ", in Proceedings of 5th International Workshop on Emerging Trends in Software Metrics (*WeTSOM 2014*) (ICSE workshop), June 3, 2014, Hyderabad, India.

Itkonen J., Mäntylä M. V., Itkonen J., "Characteristics of High Performing Testers – A Case Study", poster in Proceedings of the fourth International Symposium on Empirical Software Engineering and Measurement 2010. ([pdf](#))

Itkonen J, M. V. Mäntylä and C. Lassenius. "How Do Testers Do It? An Exploratory Study on Manual Testing Practices", International Symposium on Empirical Software Engineering and Measurement, 2009. ([pdf](#))

Vanhanen J, J. Itkonen and M.V. Mäntylä. "Lightweight Elicitation and Analysis of Software Product Quality Goals - A Multiple Industrial Case Study", in Proceedings of 3rd International Workshop on Software Product Management, pp. 42-52, 2009. ([pdf](#))

Itkonen, J., M. V. Mäntylä and C. Lassenius. "Defect Detection Efficiency: Test Case Based vs. Exploratory Testing", in proceedings of the International Symposium on Empirical Software Engineering and Measurement, pp. 61-70, 2007. ([pdf](#))

Itkonen, J. and K. Rautiainen. "Exploratory Testing: A Multiple Case Study", in *Proceedings of the International Symposium on Empirical Software Engineering* (ISESE 2005), pp. 84-93, 2005. ([pdf](#))

Itkonen, J., K. Rautiainen and C. Lassenius. "Towards Understanding Quality Assurance in Agile Software Development", in *Proceedings of the International Conference on Agility*, pp. 201-207, 2005. ([pdf](#))

Vanhanen, J., J. Itkonen and P. Sulonen. "Improving the Interface Between Business and Product Development Using Agile Practices and the Cycles of Control Framework", in *Proceedings of Agile Software Development Conference*, pp. 71-80, 2003. ([pdf](#))

Pyhäjärvi, M., K. Rautiainen and J. Itkonen. "Increasing Understanding of the Modern Testing Perspective in Software Product Development Projects", in *Proceedings of HICSS-36*, 2003.

Academic Theses

Itkonen J., "Empirical Studies on Exploratory Software Testing", Doctoral dissertation, Aalto University School of Science, November 2011. ([summary pdf](#)) ([pdf](#))

Itkonen, J. "Do test cases really matter? An experiment comparing test case based and exploratory testing". Licentiate Thesis. Helsinki University of Technology, 2008. ([pdf](#))

Other

Itkonen, J. "Quality Assurance", chapter in *Pacing Software Product Development: A Framework and Practical Implementation Guidelines*. eds. Rautiainen, K., and C. Lassenius. Helsinki University of Technology Software Business and Engineering Institute Technical Reports 3, pp. 77-106. Helsinki, 2004.

In Finnish

Itkonen J. "Tutkimuksen ja käytännön välisen kuilun partaalla - Mitä oikeastaan tiedämme testauksesta tutkimustiedon perusteella?", *Systemityö*, vol 13(4), pp. 12-15, 2006.