# 缺陷报告质量研究综述之所调研文献列表

## 说明:

(1) 所有文献按照缺陷报告质量问题的刻画、度量和改进三个方面进行归类。其中,

质量刻画对应原文的第三章 (3缺陷报告存在的质量问题)

质量度量对应原文的第四章 (4缺陷报告质量自动化度量)

质量改进对应原文的第五章 (5缺陷报告质量改进)

(2)有的论文同时涉及到上述多个主题,本列表中,我们将其放置在各个所涉及的主题下,即一篇文章可能出现在多处。

# (一)缺陷报告质量刻画

- 1. Bettenburg N, Just S, Schröter A, Weiss C, Premraj R, Zimmermann T. What makes a good bug report?. In Proc. of the FSE. 2008. 308-318.
- 2. Zimmermann T, Premraj R, Bettenburg N, Just S, Schroter A, Weiss C. What makes a good bug report?. IEEE Trans. on Software Engineering, 2010, 36(5):618-43.
- 3. Breu S, Premraj R, Sillito J, Zimmermann T. Frequently asked questions in bug reports. University of Calgary. 2009.
- 4. Laukkanen EI, Mantyla MV. Survey reproduction of defect reporting in industrial software development. In: Proc. of the ESEM. 2011. 197-206.
- 5. Wang D, Wang Q, Yang Y, Li Q, Wang H, Yuan F. "Is It Really a Defect?" An Empirical Study on Measuring and Improving the Process of Software Defect Reporting. In: Proc. of the ESEM. 2011. 434-443.
- 6. Xia X, Lo D, Wen M, Shihab E, Zhou B. An empirical study of bug report field reassignment. In: Proc. of the CSMR-WCRE. 2014. 174-183.
- 7. Davies S, Roper M. What's in a bug report?. In: Proc. of the ESEM. 2014. 1-10.
- 8. Garousi V, Ergezer EG, Herkiloğlu K. Usage, usefulness and quality of defect reports: an industrial case study. In: Proc. of the EASE. 2016. 1-6.
- 9. Yusop NS, Grundy J, Vasa R. Reporting usability defects: do reporters report what software developers need?. In: Proc. of the EASE. 2016.1-10.
- 10. Soltani M, Hermans F, Bäck T. The significance of bug report elements. Empirical Software Engineering, 2020, 25(6):5255-5294.

### (二)缺陷报告质量度量

## (1)直接质量度量

- 1. Bettenburg N, Just S, Schröter A, Weiss C, Premraj R, Zimmermann T. What makes a good bug report?. In Proc. of the FSE. 2008. 308-318.
- 2. Zimmermann T, Premraj R, Bettenburg N, Just S, Schroter A, Weiss C. What makes a good bug report?. IEEE Trans. on Software Engineering, 2010, 36(5):618-43.
- 3. Chen X, Jiang H, Li X, He T, Chen Z. Automated quality assessment for crowdsourced test reports of mobile applications. In: Proc. of the SANER. 2018. 368-379.
- 4. Chaparro O, Bernal-Cárdenas C, Lu J, Moran K, Marcus A, Di Penta M, Poshyvanyk D, Ng V. Assessing the quality of the steps to reproduce in bug reports. In: Proc. of the FSE. 2019. 86-96.
- 5. Zanetti MS, Scholtes I, Tessone CJ, Schweitzer F. Categorizing bugs with social networks: a case study on four open source software communities. In: Proc. of the ICSE. 2013. 1032-1041.
- 6. Fan Y, Xia X, Lo D, Hassan AE. Chaff from the wheat: Characterizing and determining valid bug reports. IEEE Trans. on Software Engineering, 2018, 46(5):495-525.
- 7. Aversano L, Tedeschi E. Bug report quality evaluation considering the effect of submitter reputation. In: Proc. of the SEA. 2016. 194-201.
- 8. Bhattacharya P, Ulanova L, Neamtiu I, Koduru SC. An empirical analysis of bug reports and bug fixing in open source android apps. In: Proc. of the CSMR. 2013. 133-143.
- 9. Chen X, Jiang H, Li X, Nie L, Yu D, He T, Chen Z. A systemic framework for crowdsourced test report quality assessment. Empirical Software Engineering, 2020, 25(2):1382-418.
- 10. Linstead E, Baldi P. Mining the coherence of GNOME bug reports with statistical topic models. In: Proc. of the MSR. 2009. 99-102.

- 11. Schugerl P, Rilling J, Charland P. Mining bug repositories--a quality assessment. In: Proc. of the CIMCA. 2008. 1105-1110.
- 12. Dit B, Poshyvanyk D, Marcus A. Measuring the semantic similarity of comments in bug reports. In: Proc. of the STSM. 2008. 64-71.
- 13. He J, Xu L, Fan Y, Xu Z, Yan M, Lei Y. Deep Learning Based Valid Bug Reports Determination and Explanation. In: Proc. of the ISSRE. 2020. 184-194.
- 14. Bettenburg N, Just S, Schröter A, Weiß C, Premraj R, Zimmermann T. Quality of bug reports in eclipse. In: Proc. of the 2007 OOPSLA workshop on eclipse technology eXchange. 2007. 21-25.

#### (2)间接质量度量

- 15. Hooimeijer P, Weimer W. Modeling bug report quality. In: Proc. of the ASE. 2007. 34-43.
- 16. Gromova A, Itkin I, Pavlov S, Korovayev A. Raising the quality of bug reports by predicting software defect indicators. In: Proc. of the QRS-C. 2019. 198-204.
- 17. Wang J, Cui Q, Wang Q, Wang S. Towards effectively test report classification to assist crowdsourced testing. In: Proc. of the ESEM. 2016. 1-10.
- 18. Feng Y, Jones JA, Chen Z, Fang C. Multi-objective test report prioritization using image understanding. In: Proc. of the ASE. 2016. 202-213.
- 19. Feng Y, Chen Z, Jones JA, Fang C, Xu B. Test report prioritization to assist crowdsourced testing. In: Proc. of the FSE. 2015. 225-236.

### (三)缺陷报告质量改进

#### (1)缺陷报告系统/机制的改进

- 1. Bettenburg N, Just S, Schröter A, Weiss C, Premraj R, Zimmermann T. What makes a good bug report?. In Proc. of the FSE. 2008. 308-318.
- 2. Zimmermann T, Premraj R, Bettenburg N, Just S, Schroter A, Weiss C. What makes a good bug report?. IEEE Trans. on Software Engineering, 2010, 36(5):618-43.
- 3. Zimmermann T, Premraj R, Sillito J, Breu S. Improving bug tracking systems. In: Proc. of the ICSE-C. 2009. 247-250.
- 4. Just S, Premraj R, Zimmermann T. Towards the next generation of bug tracking systems. In: Proc. of the VL/HCC. 2008. 82-85.
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- 7. Breu S, Premraj R, Sillito J, Zimmermann T. Information needs in bug reports: improving cooperation between developers and users. In: Proc. of the CSCW. 2010. 301-310.
- 8. Open Source Project Maintainers. An open letter to GitHub from the maintainers of open source projects. <a href="https://github.com/dear-github/dear-github">https://github.com/dear-github/dear-github</a>.
- 9. Dal Sasso T, Mocci A, Lanza M. What makes a satisficing bug report? In: Proc. of the QRS. 2016. 164-174.
- 10. Herraiz I, German DM, Gonzalez-Barahona JM, Robles G. Towards a simplification of the bug report form in eclipse. In: Proc. of the MSR. 2008. 145-148.
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- 13. Castro M, Costa M, Martin JP. Better bug reporting with better privacy. ACM SIGOPS Operating Systems Review, 2008, 42(2):319-328.
- 14. Song Y, Chaparro O. BEE: a tool for structuring and analyzing bug reports. In: Proc. of the FSE. 2020. 1551-1555.
- 15. Chaparro O, Lu J, Zampetti F, Moreno L, Di Penta M, Marcus A, Bavota G, Ng V. Detecting missing information in bug descriptions. In: Proc. of the FSE. 2017. 396-407.
- 16. Karim MR, Ihara A, Choi E, Iida H. Identifying and predicting key features to support bug reporting. Journal of Software: Evolution and Process. 2019, 31(12):e2184.

### (2)自动生成或增强缺陷报告

- 17. Moran K, Linares-Vásquez M, Bernal-Cárdenas C, Poshyvanyk D. Auto-completing bug reports for android applications. In: Proc. of the FSE. 2015. 673-686.
- 18. Hao R, Feng Y, Jones JA, Li Y, Chen Z. Ctras: Crowdsourced test report aggregation and summarization. In: Proc. of the ICSE. 2019. 900-911.
- 19. Moran K, Poshyvanyk D. Fixing bug reporting for mobile and GUI-based applications. In: Proc. of the ICSE-C. 2016. 831-834.
- 20. Moran K, Linares-Vásquez M, Bernal-Cárdenas C, Vendome C, Poshyvanyk D. Automatically discovering, reporting and reproducing android application crashes. In: Proc. of the ICST. 2016. 33-44.
- 21. Yu S. Crowdsourced report generation via bug screenshot understanding. In: Proc. of the ASE. 2019. 1277-1279.
- 22. Herbold S, Grabowski J, Waack S, Bünting U. Improved bug reporting and reproduction through non-intrusive gui usage monitoring and automated replaying. In: Proc. of the ICST workshop. 2011. 232-241.
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- 24. Zamfir C, Candea G. Low-overhead bug fingerprinting for fast debugging. In: Proc. of the RV. 2010. 460-468.
- 25. Zhang T, Chen J, Jiang H, Luo X, Xia X. Bug report enrichment with application of automated fixer recommendation. In: Proc. of the ICPC. 2017. 230-240.
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### (3)预测缺陷报告的具体条目

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- 33. Wang D, Zhang H, Liu R, Lin M, Wu W. Predicting Bugs' Components via Mining Bug Reports. Journal of Software, 2012, 7(5):1149-1154.
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- 35. Sabor KK, Nayrolles M, Trabelsi A, Hamou-Lhadj A. An Approach for Predicting Bug Report Fields Using a Neural Network Learning Model. In: Proc. of the ISSREW. 2018. 232-236.
- 36. Sabor KK, Hamou-Lhadj A, Trabelsi A, Hassine J. Predicting bug report fields using stack traces and categorical attributes. In: Proc. of the CASCON. 2019. 224-233.
- 37. Zhang W, Challis C. Automatic bug priority prediction using DNN based regression. In: Proc. of the CNC-FSKD, 2019, 333-340.
- 38. Umer Q, Liu H, Illahi I. CNN-based automatic prioritization of bug reports. IEEE Trans. on Reliability, 2019, 69(4):1341-1354.
- 39. Kanwal J, Maqbool O. Bug prioritization to facilitate bug report triage. Journal of Computer Science and Technology, 2012, 27(2):397-412.
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- 41. Tian Y, Lo D, Xia X, Sun C. Automated prediction of bug report priority using multi-factor analysis. Empirical Software Engineering, 2015, 20(5):1354-1383.
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- 44. Yu L, Tsai WT, Zhao W, Wu F. Predicting defect priority based on neural networks. In: Proc. of the ADMA. 2010. 356-367.
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- 69. Tian Y, Lo D, Sun C. Information retrieval based nearest neighbor classification for fine-grained bug severity prediction. In: Prof. of the WCRE. 2012. 215-224.
- 70. Kanwal J, Maqbool O. Bug prioritization to facilitate bug report triage. Journal of Computer Science and Technology, 2012, 27(2):397-412.
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- 72. Kumari M, Singh VB. An improved classifier based on entropy and deep learning for bug priority prediction. In: Proc. of the ISDA. 2018. 571-580.
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- 87. Chaturvedi KK, Singh VB. Determining bug severity using machine learning techniques. In: Prof. of the CONSEG. 2012. 1-6.
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## (4)其他

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