

Publications of Romain Robbes by year

Year 2010

1. Romain Robbes, Michele Lanza. Improving Code Completion with Program History. *Automated Software Engineering (JASE)* 17(2):181-212, Jun 2010. Springer, Netherlands. ISSN 0928-8910. Special Issue, best papers of ASE 2008.
2. Alberto Bacchelli, Michele Lanza, Romain Robbes. Linking E-mails and Source Code Artifacts. In Jeff Kramer, Judith Bishop, Premkumar T. Devanbu, Sebastián Uchitel (ed.), *Proc. 32nd ACM/IEEE International Conference on Software Engineering (ICSE)*, pp. 375-384, May 2010. Cape Town, South Africa. ACM Press, New York, NY, USA. ISBN 978-1-60558-719-6.
3. Romain Robbes, Damien Pollet, Michele Lanza. Replaying IDE Interactions to Evaluate and Improve Change Prediction Approaches. In Jim Whitehead, Thomas Zimmermann (ed.), *Proc. 7th IEEE Working Conference on Mining Software Repositories (MSR)*, pp. 161-170, May 2010. Cape Town, South Africa. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-4244-6802-7.
4. Marco D'Ambros, Michele Lanza, Romain Robbes. An Extensive Comparison of Bug Prediction Approaches. In Jim Whitehead, Thomas Zimmermann (ed.), *Proc. 7th IEEE Working Conference on Mining Software Repositories (MSR)*, pp. 31-41, May 2010. Cape Town, South Africa. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-4244-6802-7.
5. Marco D'Ambros, Michele Lanza, Romain Robbes. Commit 2.0. In *Proc. 1 ICSE Workshop on Web 2.0 for Software Engineering (Web2SE)*, pp. 14-19, May 2010. Cape Town, South Africa.
6. Alexandre Bergel, Romain Robbes, Walter Binder. Visualizing Dynamic Metrics with Profiling Blueprints. In Jan Vitek (ed.), *Proc. 48th International Conference on Objects, Models, Components, Patterns (TOOLS)*, pp. 291-309, Jun 2010. Málaga, Spain. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science. ISBN 978-989-674-009-2.
7. Mircea Lungu, Romain Robbes, Michele Lanza. Recovering Inter-Project Dependencies in Software Ecosystems. In Charles Pecheur, Jamie Andrews, Elisabetta di Nitto (ed.), *Proc. 25th ACM/IEEE International Conference on Automated Software Engineering (ASE)*, pp. 309-312, Sep 2010. Antwerp, Belgium. ACM Press, New York, NY, USA. ISBN 978-1-4503-0116-9.
8. Romain Brixtel, Mathieu Fontaine, Boris Lesner, Cyril Bazin, Romain Robbes. Language-Independent Clone Detection Applied to Plagiarism Detection. In Massimiliano Di Penta, Cristina Marinescu, Jurgen Vinju (ed.), *Proc. 10th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM)*, pp. 77-86, Sep 2010. Timisoara, Romania. IEEE Press, Piscataway, NJ, USA. ISBN 978-0-7695-4178-5.

9. Alcides Quispe, Maira Marques, Luis Silvestre, Sergio Ochoa, Romain Robbes. Requirements Engineering Practices in Very Small Software Enterprises: A Diagnostic Study. In Sergio Ochoa, Federico Meza, Domingo Mery, Claudio Cubillos (ed.), *Proc. 29 Proceedings of the International Conference of the Chilean Computer Science Society (SCCC)*, pp. 81-87, Nov 2010. Antofagasta, Chile. IEEE Computer Society Press, Los Alamitos, CA, USA.

Year 2011

1. Marco D'Ambros, Michele Lanza, Mircea Lungu, Romain Robbes. On porting software visualization tools to the web. *Software Tools for Technology Transfer (STTT)* 13(2):181-200, Apr 2011. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1433-2779.
2. Oscar Callau, Romain Robbes, Éric Tanter, David Rothlisberger. How Developers use the Dynamic Features of Programming Languages: The Case of Smalltalk. In *Proc. 8th IEEE Working Conference on Mining Software Repositories (MSR)*, pp. 23-32, May 2011. Honolulu, Hawaii, USA. ACM Press, New York, NY, USA. Best Paper Award.
3. Romain Robbes, Mircea Lungu. A Study of Ripple Effects in Software Ecosystems. In *Proc. 33rd ACM/IEEE International Conference on Software Engineering (ICSE)*, pp. 904-907, May 2011. ACM Press, New York, NY, USA. ISBN 978-1-4503-0445-0.
4. Richard Wettel, Michele Lanza, Romain Robbes. Software Systems as Cities: A Controlled Experiment. In *Proc. 33rd ACM/IEEE International Conference on Software Engineering (ICSE)*, pp. 551-560, May 2011. ACM Press, New York, NY, USA. ISBN 978-1-4503-0445-0.
5. Fernando Olivero, Michele Lanza, Marco D'Ambros, Romain Robbes. Enabling Program Comprehension through a Visual Object-Focused Development Environment. In Brad Myers, Gennaro Costagliola, and Andrew Ko (ed.), *Proc. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, pp. 127-134, Sep 2011. Pittsburgh, PA, USA. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-4577-1246-3.
6. Romain Robbes. Supporting Empirical Software Engineering via Mining Software Repositories. In Hernan Astudillo and Cecilia Bastarrica (ed.), *Proc. International Workshop on Advanced Software Engineering (IWASE)*, Nov 2011.
7. Marco D'Ambros, Romain Robbes. Effective Mining of Software Repositories. In Andrian Marcus, James R. Cordy, Paolo Tonella (ed.), *Proc. 27th IEEE International Conference on Software Maintenance (ICSM)*, pp. 598, Sep 2011. Williamsburgh, VI, USA. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-4577-0662-2.
8. Romain Robbes, Anthony Cleve, ed. *Proceedings of the 12th International Workshop on Principles of Software Evolution (IWPSE)*, Sep 2011. Szeged, Hungary. ACM Press, New York, NY, USA. ISBN 978-1-4503-0848-9.

Year 2012

1. Alexandre Bergel, Felipe Bañados, Romain Robbes, David Roethlisberger. Spy: A Flexible Code Profiling Framework. *Computer Languages, Systems & Structures (COMLAN)* 38(1):16-28, Apr 2012. Elsevier Science, Amsterdam, The Netherlands. ISSN 1477-8424.
2. Romain Robbes, Michele Lanza, Lile Hattori. Refining Code Ownership with Synchronous Changes. *Empirical Software Engineering (EMSE)* 17(4-5):467-499, Aug 2012. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
3. Marco D'Ambros, Michele Lanza, Romain Robbes. Evaluating Defect Prediction Approaches: A Benchmark and an Extensive Comparison. *Empirical Software Engineering (EMSE)* 17(4-5):531-577, Aug 2012. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
4. Romain Robbes, David Roethlisberger, Éric Tanter. Extensions during Software Evolution: Do Objects Meet Their Promise?. In James Noble (ed.), *Proc. European Conference on Object-Oriented Programming (ECOOP)*, pp. 28-52, Jun 2012. Beijing, China. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science.
5. Sebastian Kleinschmager, Stefan Hanenberg, Romain Robbes, Éric Tanter, Andreas Stefik. Do Static Type Systems Improve the Maintainability of Software Systems? An Empirical Study. In *Proc. 20th IEEE International Conference on Program Comprehension (ICPC)*, pp. 153-162, Jun 2012. Passau, Germany. IEEE Computer Society Press, Los Alamitos, CA, USA. ISBN 978-1-4673-1216-5.
6. Felipe Bañados, Romain Robbes, Alexandre Bergel, Walter Binder. Execution Profiling Blueprints. *Software: Practice and Experience* 42(9):1165-1192, Sep 2012. John Wiley & Sons, Hoboken, NJ, USA. ISSN 0038-0644.
7. Clemens Mayer, Stefan Hanenberg, Romain Robbes, Éric Tanter, Andreas Stefik. An Empirical Study of the Influence of Static Type Systems on the Usability of Undocumented Software. In *Proc. ACM International Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA)*, pp. 683-702, Oct 2012. ACM Press, New York, NY, USA. ISBN 978-1-4503-1561-6.
8. Romain Robbes, Mircea Lungu, David Roethlisberger. How Do Developers React to API Deprecation? The Case of a Smalltalk Ecosystem. In W. Tracz, M. Robillard, T. Bultan (ed.), *Proc. 20th ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE)*, pp. article 56, Nov 2012. Cary, NC. ACM Press, New York, NY, USA. ISBN 978-1-4503-1614-9.
9. Fernando Olivero, Michele Lanza, Marco D'Ambros, Romain Robbes. Tracking Human-Centric Controlled Experiments with Biscuit. In E. Murphy-Hill, C. Sadowski, S. Markstrum (ed.), *Proc. 4th ACM Annual Workshop on Evaluation and Usability of Programming Languages and Tools (PLATEAU)*, pp. 1-6, Oct 2012. ACM Press, New York, NY, USA. ISBN 978-1-4503-1631-6.

Year 2013

1. Romain Robbes, David Roethlisberger. Using Developer Interaction Data to Compare Expertise Metrics. In T. Zimmermann, M. Di Penta, S. Kim (ed.), *Proc. 7th IEEE Working Conference on Mining Software Repositories (MSR)*, pp. 297-300, May 2013. San Francisco. ACM Press, New York, NY, USA. ISBN 978-1-4673-2936-1.
2. Romain Robbes, Gregorio Robles, ed. *Proceedings of the 13th International Workshop on Principles of Software Evolution (IWPSE)*, Aug 2013. Saint Petersburg, Russia. ACM Press, New York, NY, USA.
3. Claudio Gutierrez, Romain Robbes. WEON: Towards a softWare Ecosystem ONtology. In Mircea Lungu, Jens Knodel, Peter Knauber (ed.), *Proc. 1st International Workshop on Software Ecosystem Architecture (WEA)*, pp. 16-20, Aug 2013. Saint Petersburg, Russia. ACM Press, New York, NY, USA.
4. Oscar Callau, Romain Robbes, Éric Tanter, David Roethlisberger. How (and Why) Developers Use the Dynamic Features of Programming Languages: the Case of Smalltalk. *Empirical Software Engineering (EMSE)* 18(6):1156-1194, Dec 2013. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
5. Romain Robbes, René Vidal, Cecilia Bastarrica. Are Software Analytics Efforts Worthwhile for Small Companies? The Case of Amisoft. *IEEE Software* 30(5):46-53, Sep 2013. IEEE Press, Piscataway, NJ, USA. ISSN 0740-7459.
6. Ralf Lämmel, Rocco Oliveto, Romain Robbes, ed. *Proceedings of the 20th Working Conference on Reverse Engineering (WCRE)*, Oct 2013. Koblenz, Germany. IEEE Computer Society Press, Los Alamitos, CA, USA.

Year 2014

1. Johan Fabry, Romain Robbes, Marcus Denker. DIE: A Domain Specific Aspect Language for IDE Events. *Journal of Universal Computer Science (JUCS)* 20(2):135-168, Feb 2014. Graz University of Technology, Graz, Austria. ISSN 0948-695X.
2. Cecilia Bastarrica, Gerardo Matrurri, Romain Robbes, Luis Silvestre, René Vidal. How does Quality of Formalized Software Processes Affect Adoption?. In Matthias Jarke, John Mylopoulos, Christoph Quix, Colette Rolland, Yannis Manolopoulos, Haralambos Mouratidis, Jennifer Horkoff (ed.), *Proc. 26th International Conference Advanced Information Systems Engineering (CAiSE)*, pp. 226-240, Jun 2014. Thessaloniki, Greece. SpringerOpen, Springer-Verlag, Heidelberg, Germany. Lecture Notes in Computer Science vol. 8484. ISBN 978-3-319-07880-9.
3. Walid Maalej, Thomas Fritz, Romain Robbes. Collecting and Processing Interaction Data for Recommendation Systems. In *Recommendation Systems in Software Engineering*, pp. chapter 7, May 2014. Springer, London, UK. ISBN 978-3-642-45134-8.

4. Stefan Endrikat, Stefan Hanenberg, Romain Robbes, Andreas Stefik. How do API Documentation and Static Typing Affect API Usability?. In Pankaj Jalote, Lionel Briand, Andre van der Hoek (ed.), *Proc. 36th ACM/IEEE International Conference on Software Engineering (ICSE)*, pp. 632-642, May 2014. Hyderabad, India. ACM Press, New York, NY, USA. ISBN 978-1-4503-2768-8.
5. Pujan Petersen, Stefan Hanenberg, Romain Robbes. An Empirical Comparison of Static and Dynamic Type Systems on API Usage in the Presence of an IDE: Java vs. Groovy with Eclipse. In Chanchal Roy, Andrew Begel, Leon Moonen (ed.), *Proc. 22nd IEEE International Conference on Program Comprehension (ICPC)*, pp. 212-222, Jun 2014. Hyderabad, India. IEEE Computer Society Press, Los Alamitos, CA, USA. ISBN 978-1-4503-2879-1.
6. Stefan Hanenberg, Sebastian Kleinschmager, Romain Robbes, Éric Tanter, Andreas Stefik. An Empirical Study on the Impact of Static Typing on Software Maintainability. *Empirical Software Engineering (EMSE)* 19(5):1335-1382, Oct 2014. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
7. Oscar Callau, Romain Robbes, Éric Tanter, David Roethlisberger, Alexandre Bergel. On the Use of Type Predicates in Object-Oriented Software: The Case of Smalltalk. In *Proc. 10th Dynamic Languages Symposium (DLS)*, pp. 135-146, Oct 2014. Portland, OR, USA. ACM Press, New York, NY, USA.

Year 2015

1. Oscar Callau, Romain Robbes, Éric Tanter, David Roethlisberger, Alexandre Bergel. On the Use of Type Predicates in Object-Oriented Software: The Case of Smalltalk. *ACM SIGPLAN Notices (SIGPLAN)* 50(2):135-146, Feb 2015. ACM Press, New York, NY, USA. ISSN 0362-1340.
2. Romain Robbes, David Roethlisberger, Éric Tanter. Object-Oriented Software Extensions in Practice. *Empirical Software Engineering (EMSE)* 20(3):745-782, Jun 2015. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
3. Meiyappan Nagappan, Romain Robbes, Yasutaka Kamei, Éric Tanter, Shane McIntosh, Audris Mockus, Ahmed E. Hassan. An Empirical Study of Goto in C Code from GitHub Repositories. In *Proc. 10th ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE)*, pp. 404-414, Aug 2015. Bergamo, Italy. ACM Press, New York, NY, USA. ISBN 978-1-4503-3675-8.
4. Juraj Kubelka, Alexandre Bergel, Andrei Chis, Tudor Girba, Stefan Reichhart, Romain Robbes, Aliaksei Syrel. On understanding how developers use the Spotter search tool. In *Proc. 3rd IEEE Working Conference on Software Visualization (VISOFT)*, pp. 145-149, Sep 2015. Bremen, Germany. IEEE Computer Society Press, Los Alamitos, CA, USA.
5. Andre Hora, Romain Robbes, Nicolas Anquetil, Anne Etien, Stephane Ducasse, Marco Tulio Valente. How do Developers React to API Evolution? The Pharo Ecosystem Case. In *Proc.*

31st IEEE International Conference on Software Maintenance (ICSM), pp. 251-260, Sep 2015. Bremen, Germany. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-4673-7532-0.

6. Nevena Milojkovic, Andrea Caracciolo, Mircea Lungu, Oscar Nierstrasz, David Roethlisberger, Romain Robbes. Polymorphism in the Spotlight: Studying Its Prevalence in Java and Smalltalk. In *Proc. 23rd IEEE International Conference on Program Comprehension (ICPC)*, pp. 186-195, May 2015. Florence, Italy. IEEE Computer Society Press, Los Alamitos, CA, USA.
7. Massimiliano Di Penta, Martin Pinzger, Romain Robbes, ed. *Proceedings of the 12th IEEE Working Conference on Mining Software Repositories (MSR)*, May 2015. Florence, Italy. ACM Press, New York, NY, USA. ISBN 978-0-7695-5594-2.
8. Victor Gonzalez, Romain Robbes, Gabriela Gongora, Salvador Medina. Measuring Concentration While Programming with Low-Cost BCI Devices: Differences Between Debugging and Creativity Tasks. In *Proc. 9th Human-Computer Interaction International (HCII)*, pp. 605-615, Aug 2015. Los Angeles, USA. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science. ISBN 978-3-319-20815-2.
9. Heider Sanchez, Romain Robbes, Victor Gonzalez. An Empirical Study of Work Fragmentation in Software Evolution Tasks. In *Proc. 22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*, pp. 251-260, Mar 2015. Montréal, Canada. IEEE Computer Society Press, Los Alamitos, CA, USA.

Year 2016

1. Gleison Brito, Andre Hora, Marco Tulio Valente, Romain Robbes. Do Developers Deprecate APIs with Replacement Messages? A Large-Scale Analysis on Java Systems. In *Proc. 23rd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*, pp. 360-369, Mar 2016. Osaka, Japan. IEEE Computer Society Press, Los Alamitos, CA, USA.
2. Roberto Minelli, Andrea Mocci, Romain Robbes, Michele Lanza. Taming the IDE with Fine-grained Interaction Data. In Jonathan I. Malefic, Gabriele Bavota (ed.), *Proc. 24th IEEE International Conference on Program Comprehension (ICPC)*, May 2016. Austin, Texas. IEEE Computer Society Press, Los Alamitos, CA, USA.
3. Romain Robbes, Rocco Oliveto, Massimiliano Di Penta, ed. Guest Editorial: Special Section on Software Reverse Engineering. *Empirical Software Engineering (EMSE)* 21(3):749-752, Jun 2016. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1382-3256.
4. Miryung Kim, Romain Robbes, Christian Bird, ed. *Proceedings of the 13th IEEE Working Conference on Mining Software Repositories (MSR)*, May 2016. Austin, Texas, USA. ACM Press, New York, NY, USA. ISBN 978-1-4503-4186-8.

5. Andre Hora, Marco Tulio Valente, Romain Robbes, Nicolas Anquetil. When Should Internal Interfaces be Promoted to Public?. In T. Zimmermann, J. Cleland-Huang, Z. Su (ed.), *Proc. 24th ACM SIGSOFT Symposium on Foundations of Software Engineering (FSE)*, pp. 278-289, Nov 2016. Seattle, USA. ACM Press, New York, NY, USA. ISBN 978-1-4503-4218-6.
6. Anand Sawant, Romain Robbes, Alberto Bacchelli. On the Reaction to Deprecation of 25,357 Clients of 4+1 Popular Java APIs.. In Nicholas Kraft, Tim Menzies, Bram Adams, Denys Poshyvanyk (ed.), *Proc. 32 IEEE International Conference on Software Maintenance (ICSM)*, pp. 400-410, Oct 2016. Raleigh, NC, USA. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-5090-3806-0.

Year 2017

1. Luis Carlos Cruz Diaz, Heider Sanchez, Victor Gonzalez, Romain Robbes. Work Fragmentation in Developer Interaction Data. *Journal of Software: Evolution and Process (JSEP)* 29(3):e1839, Mar 2017. John Wiley & Sons, Hoboken, NJ, USA. ISSN 2047-7481.
2. Quinten David Soetens, Romain Robbes, Serge Demeyer. Changes as First-Class Citizens: A Research Perspective on Modern Software Tooling. *ACM Computing Surveys (CSUR)* 50(2):article 18, Apr 2017. ACM Press, New York, NY, USA. ISSN 0360-0300.
3. Sergio Ochoa, Romain Robbes, Maira Marques, Luis Silvestre, Alcides Quispe. What Differentiates Chilean Niche Software Companies: Business Knowledge and Reputation. *IEEE Software* 34(3):96-103, May 2017. IEEE Press, Piscataway, NJ, USA. ISSN 0740-7459.