

Alberto Bacchelli

University of Zurich

contacts

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publication indexes

<http://Google Scholar>
<http://DBLP>

languages

Italian: native speaker
English: fluent
French: conversational

professional memberships

ACM

about

Dr. Bacchelli is an associate professor of **Empirical Software Engineering** at University of Zurich, Switzerland, where he leads the Zurich Empirical Software Engineering Team (ZEST).

His broader research vision is to move software engineering away from decisions based on intuition, or development activities painstakingly conducted manually, into solutions created using data-driven mathematical models, which make use of the large amount of information available during the software engineering process.

He has received the MSR Ric Holt Early Career Achievement Award 2020 for his seminal contributions to modern code review. He is recipient of in total six Best Paper Awards and ACM SIGSOFT Distinguished Paper Awards, awarded from the top academic venues in software engineering and computer supported collaborative work.

education

04.2009–06.2013	Ph.D. in Informatics Thesis: <i>Mining Unstructured Software Data</i> Supervisor: <i>Prof. Dr. Michele Lanza</i>	Università della Svizzera Italiana, Switzerland
04.2006–03.2008	M.Sc. in Computer Science Final grade: <i>110/110 cum laude</i>	University of Bologna, Italy
09.2006–06.2007	M.Sc. year within EU Erasmus program Main subjects: Software Engineering and Probabilistic Models	Université Libre de Bruxelles, Belgium
09.2002–03.2006	B.Sc. in Computer Science Final grade: <i>110/110 cum laude</i>	University of Bologna, Italy

professional appointments

10.2020–now	Associate professor (with tenure)	University of Zurich, Switzerland
07.2019–now	Scientific Consultant	Huawei Technologies Co., Ltd., China
08.2017–09.2020	SNSF Assistant professor	University of Zurich, Switzerland
09.2013–08.2017	Assistant professor (tenured after tenure-track)	TU Delft, The Netherlands
04–08.2013	Microsoft Research intern	Microsoft Research, Redmond, USA
05–08.2012	Microsoft Research intern	Microsoft Research, Redmond, USA
04.2008–04.2009	Software Engineer	CINECA, Italy
05–08.2007	Student software engineer	Google Summer of Code

research

awards and honors

- 2021 **ACM SIGSOFT Distinguished Paper Award** ICSE 2021
“Why Don’t Developers Detect Improper Input Validation? ’ ; DROP TABLE Papers; -- ”
- 2020 **Mining Software Repositories Ric Holt Early Career Achievement Award** MSR 2020
Awarded to junior researchers who provided outstanding contributions in the field.
- ACM SIGSOFT Distinguished Artifact Award** ICSE 2020
Artifact of “Primers or Reminders? The Effects of Existing Review Comments on Code Review”
- 2018 **Best Paper Honorable Mention** CSCW 2018
“Information Needs in Contemporary Code Review”
- 2017 **ACM SIGSOFT Distinguished Paper Award** MSR 2017
“Classifying code comments in Java open-source software systems”
- 2016 **ACM SIGSOFT Distinguished Paper Award** ICSE 2016
“Work Practices and Challenges in Pull-Based Development: The Contributor’s Perspective”
- 2015 **Best Paper Award** CSCW 2015
“Supporting Developers’ Coordination in The IDE”
- 2014 **Google Faculty Research Award** Google 2014
Program focused on funding world-class technical research in Computer Science and Engineering.
- 2009 **Best Paper Award** WCRE 2009
“Benchmarking Lightweight Techniques to Link E-Mails and Source Code”
- 2008 **Best Paper Award** ICSEA 2008
“On the Effectiveness of Manual and Automatic Unit Test Generation”

nominations for awards and honors

- 2018 **Nomination for ACM SIGSOFT Distinguished Paper Award** ESEC/FSE 2018
“What Makes A Code Change Easier To Review: An Empirical Investigation On Code Change Reviewability”
- 2016 **Nomination for Best Paper Award** ICSME 2016
“On the reaction to deprecation of 25,357 clients of 4+1 popular Java APIs”
- 2015 **Nomination for Best Paper Award** SANER 2015
“Untangling Fine-Grained Code Changes”
- 2014 **Finalist for the Cor Baayen Award** ERCIM 2014
ERCIM awards promising young researchers in computer science and applied mathematics.
- 2013 **Nomination for ACM SIGSOFT Distinguished Paper Award** ICSE 2013
“Expectations, Outcomes, and Challenges of Modern Code Review”

grants and funding

- 2020 **SNSF Project - Enhanced Code Review** PI – approx. 800k CHF
Using Context and Learning from Review Experience.
- 2019 **Hasler Stiftung - Test Authority: A New Path to Measure Test Quality** Co-PI – approx. 50k CHF
Defining a new way to measure test quality beyond code coverage.
- 2018 **AdNovum - Knowledge Awareness in Solution Development Lifecycle** Co-PI – 60k CHF
On software artifacts traceability for code reuse.
- 2017 **SNSF Professorship - Data-driven Contemporary Code Review** PI – approx. 1.5M CHF
On transforming code review into an engineering approach.
- 2016 **STW Take Off - PReview Code** PI – 40k EUR
On an approach to improve the understandability of changes under review.
- 2015 **NWO Top-1 grant - Persistent Code Reviewing** Co-PI – approx. 650k EUR
On investigating techniques to persist and generalize code review efforts.
- 2014 **EU Horizon 2020 MSCA-ITN-2014-EID - SENECA** Co-PI – 255k EUR of 2.2M EUR
On data science for software engineering in the cloud.
- INRIA Associate Team - Improving code review tools** Co-PI – 10K EUR
On creating novel code review tools for dynamically typed languages.
- Google Faculty Research Award** PI – approx. 50k EUR
On investigating the code review process.

invited talks

- 2019 **Software Analytics: Understanding and Supporting Programming With Data** St. Gallen, Switzerland
University of St. Gallen
- Contemporary Code Review Practices** Shenzhen, China
Huawei Technologies Co., Ltd.
- 2018 **What Do Code Reviews at Microsoft and in OSS Have in Common?** Zurich, Switzerland
adesso Schweiz
- 2017 **Evidence-based Code Review** London, United Kingdom
56th CREST Open Workshop, University College London
- Contemporary Peer Code Review** Zurich, Switzerland
Software Evolution and Architecture Lab, University of Zurich
- 2016 **Advances in Code Review** Amsterdam, The Netherlands
BESTSELLER
- What Do Code Reviews at Microsoft and in OSS Have in Common?** Bruxelles, Belgium
FOSDEM 2016
- Data-driven Contemporary Code Review** Zurich, Switzerland
University of Zurich, Switzerland
- Data-driven Contemporary Code Review** Lugano, Switzerland
Università della Svizzera Italiana, Switzerland
- 2015 **Code review needs the right approach** Bodegraven, The Netherlands
Stabiplan BV
- Expectations, Outcomes, and Challenges of Modern Code Review** Berlin, Germany
Software engineering research group (AG SE), Freie Universität Berlin
- Software Analytics needs the right data and the right questions** London, England
Software Systems Engineering Group, University College London
- Mining Unstructured Software Data** Nijmegen, The Netherlands
Digital security group, Radboud Universiteit Nijmegen
- Supporting Developers' Teamwork in The IDE** Vancouver, BC, Canada
Software Analysis and Testing (SALT) lab, University of British Columbia
- 2014 **Mining Unstructured Software Data** Namur, Belgium
PReCISE Research Center, Université de Namur
- 2012 **Pearls In The MUD, Mining Structured Data in NL Artifacts** Delft, The Netherlands
Software Engineering Research Group (SERG), TU Delft
- Mining Development Email Archives** Victoria, Canada
Computer Human Interaction & Software Engineering Lab, University of Victoria
- Mining Development Email Archives** Montreal, QC, Canada
SOCCER Lab, École Polytechnique de Montréal
- Mining Development Email Archives** Kingston, ON, Canada
Software Analysis and Intelligence Lab, Queen's University

professional service

conferences

- 2022 **ICSE** (PC member),
- 2021 **ASE** (PC member), **EASE** (PC member), **ESEC/FSE** (PC member),
- 2020 **ASE** (PC member), **CSCW** (Associate chair), **MSR** (PC member, SC member)
- 2019 **ASE** (PC member), **CSCW** (Associate chair), **ESEC/FSE** (PC member), **ICPC** (PC member), **ICSME** (PC member), **MSR** (PC member, SC member)
- 2018 **ASE** (PC member), **ESEC/FSE** (PC member), **ICPC** (PC member), **MSR** (PC member, SC member)
- 2017 **ESEC/FSE** (PC member), **ICSE** (PC member)
- 2016 **ICSE** (PC member), **ICPC** (PC member), **ICSME** (Tool demo track, co-chair), **IWESEP** (PC member), **MSR** (PC member), **MUD** (SC member), **SANER** (ERA track, co-chair),
- 2015 **ASE** (Tool demo track, PC member), **FSE** (Tool demo track, PC member), **ICPC** (PC member), **ICSE** (social networking co-chair), **ICSME** (PC member), **ISEC** (PC member), **MSR** (PC member), **MUD** (SC member), **SANER** (PC member)
- 2014 **ACM SRC** (PC member), **CSEE&T** (PC member), **CSMR-WCRE** (PC member), **ECOOP** (artifact evaluation, PC member), **ICSME** (PC member), **MSR** (PC member), **MUD** (co-organizer)
- 2013 **CSS&T** (PC member), **CSMR** (ERA track, PC member) **ICPC** (ERA track, PC member), **ICSM** (Tool demo track, PC member), **MSR** (Mining challenge chair), **MUD** (co-organizer), **NaturalISE** (co-organizer), **WCRE** (PC member)
- 2012 **CSEE&T** (PC member), **CSMR** (publicity chair), **ICSM** (publicity chair), **MSR** (Mining challenge, PC member), **MUD** (co-organizer)

journal referee

- TOSEM** ACM Transactions on Software Engineering and Methodology, ACM.
- TSE** IEEE Transactions on Software Engineering, IEEE Computer Society.
- EMSE** Empirical Software Engineering: An International Journal, Springer.
- JSEP** Journal of Software: Evolution and Process (formerly known as Journal on Software Maintenance and Evolution: Research and Practice, JSME), John Wiley & Sons.
- JSS** Journal of Systems and Software, Elsevier.
- PeerJ** PeerJ Computer Science.

Reviewer for Funding Organizations

- Chan Zuckerberg Initiative** Reviewer for the Essential Open Source Software for Science initiative.
Years: 2018, 2019, 2020.
- DFG, German Research Foundation** Reviewer for Project Proposals.
Year 2019.
- SNF, Swiss National Science Foundation** Reviewer for Project Proposals.
Year 2014.

Miscellanea

- ACM SIGSOFT** Committee member for the Doctoral Dissertation Award 2020.

teaching

instructor

2019–2020	Software Testing (B. Sc. and M.Sc.)	instructor – University of Zurich
	START Hackademy (B.Sc. and M.Sc.)	instructor – HSG
	Data Science for Software Engineering (B.Sc. and M.Sc.)	instructor – University of Zurich
	Software Construction (B.Sc.) Students learn the fundamental principles and practices to design large software systems that are simple to maintain and evolve.	instructor – University of Zurich
2018–2019	SHSG Summer School (B. Sc. and M.Sc.)	instructor – HSG
	Software Testing (B. Sc. and M.Sc.) Students learn theoretical aspects of software testing and how to apply them.	co-instructor – University of Zurich
	START Hackademy (B.Sc. and M.Sc.)	instructor – HSG
	Data Science for Software Engineering (B.Sc. and M.Sc.)	instructor – University of Zurich
2017–2018	SHSG Summer School (B. Sc. and M.Sc.) Students without knowledge in programming learn how to program.	instructor – HSG
	START Hackademy (B.Sc. and M.Sc.) Students without knowledge in programming learn how to program.	instructor – University of Zurich
	Data Science for Software Engineering (B.Sc. and M.Sc.) Students explore the topic and work on creating a research proposal on a novel idea.	instructor – University of Zurich
	Mining Software Repositories (M.Sc.)	instructor – TU Delft
	Software Engineering Methods (B.Sc.)	co-instructor – TU Delft
2015 ... 2017	Context Project (B.Sc.)	co-coordinator, SE instructor, and context teacher – TU Delft
	Mining Software Repositories (M.Sc.)	instructor – TU Delft
	Software Engineering Methods (B.Sc.)	instructor – TU Delft
2014–2015	Context Project (B.Sc.)	co-coordinator and SE instructor – TU Delft
	Mining Software Repositories (M.Sc.) Students learn about recent research on software analytics and implement a full data mining approach, from data collection and analysis scripts to final report writing.	instructor – TU Delft
	Software Engineering Methods (B.Sc.)	instructor – TU Delft
2013–2014	Context Project (B.Sc.) Students learn to develop, implement, validate, present, and demonstrate a software product that satisfies the needs of an external party in a given non-ICT context. I co-coordinated the eight teachers involved and I was responsible for supervising and evaluating the software engineering aspects of the course.	co-coordinator and SE instructor – TU Delft
	Software Engineering Methods (B.Sc.) Students learn the basics of software engineering. Topics include requirements engineering, advanced OO programming, design patterns, UML, agile methodologies, software visualization.	instructor – TU Delft

student supervision (since being assistant professor)

in progress	David Ackermann <i>Fuzz Testing</i>	since Aug 2020, Ph.D. student
	Larissa Barbosa <i>Code review and security</i>	since Nov 2018, Ph.D. student
	Enrico Fregnan <i>Software Coupling</i>	since Aug 2018, Ph.D. student
	Pavlna Wurzelová <i>Social Aspects Of Code Review</i>	since Jun 2018, Ph.D. student
	Vladimir Kovalenko <i>Data-Driven Software Engineering Supporting Quality In Test Code For Higher Quality Software Systems</i>	since Oct 2016, Ph.D. student
	Davide Spadini <i>Supporting Quality In Test Code For Higher Quality Software Systems</i>	since Jul 2016, Ph.D. student
2020	Luca Pascarella <i>Augmented fine-grained defect prediction for code review</i>	Jan 2016 - Sep 2020, Ph.D.
2019	Anand Ashok Sawant <i>Mining fine-grained large-scale API usage</i>	Jan 2016 - Oct 2019, Ph.D.
	David Ackermann <i>Curiosity Guided Fuzz Testing</i>	M.Sc. Thesis , University of Zurich
	Andrea Capobianco <i>Software Vulnerability Prediction on Commit Level</i>	M.Sc. Thesis , University of Zurich
	Lorenzo Gasparini <i>Software Visualization for Code Review</i>	M.Sc. Thesis , TU Delft
2018	Enrico Fregnan <i>Auto-ordering Code Changes for Review</i>	M.Sc. Thesis , TU Delft
	Moritz Eck <i>Automatic Categorization Of Flaky Tests</i>	B.Sc. Thesis , University of Zurich
2017	Menno Oudshoorn and Bart de Jonge <i>Unobtrusive automated support for software developers</i>	Honors program , TU Delft
	Jorden van Breemen <i>On the Effect of Code Quality on Agile Effort Estimations: The Case of Shell</i>	M.Sc. Thesis , TU Delft
2016	Eva Anker and Tim van der Lippe and Thomas Smith <i>Enhanced GitHub code review</i>	B.Sc. Project , TU Delft
2015	Reinier Hartog <i>Octopull: Supporting reviews of pull-requests</i>	M.Sc. Thesis , TU Delft
	Ahmad Yandriansyah Reza <i>Requirements Engineering Practices in Global Software Engineering Organization</i>	co-supervision with D.M. van Solingen, M.Sc. Thesis , TU Delft
	Anand Sawant <i>Mining fine-grained API usage from GitHub</i>	M.Sc. Thesis , TU Delft
	Vincent Hellendoorn <i>Empirical Software Linguistics: An Investigation of Code Reviews, Recommendations and Faults</i> Best Master Thesis of the EEMCS Faculty 2015	M.Sc. Thesis , TU Delft

References

prof. dr. Michele Lanza

Role: Professor
Affiliation: Università della Svizzera Italiana
Address: Via G. Buffi 13, CH-6904 Lugano, Switzerland
Email: michele.lanza@usi.ch
Web: <http://www.inf.usi.ch/lanza/>
Phone: +41 58 666 4659

prof. dr. Harald Gall

Role: Professor and Dean
Affiliation: University of Zurich
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Web: <http://www.ifi.uzh.ch/en/seal/people/gall.html>
Phone: +41 44 635 43 21

prof. dr. Premkumar T. Devanbu

Role: Professor
Affiliation: University of California, Davis
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Email: devanbu@cs.ucdavis.edu
Web: <http://www.cs.ucdavis.edu/~devanbu>
Phone: +1 530 752-7324

prof. dr. Massimiliano Di Penta

Role: Associate Professor
Affiliation: University of Sannio
Address: Palazzo ex Poste, Via Traiano, I-82100 Benevento (Italy)
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Web: <http://www.ing.unisannio.it/mdipenta/>
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prof. dr. Margaret-Anne Storey

Role: Professor
Affiliation: University of Victoria
Address: Department of Computer Science, University of Victoria, PO Box 3055,
STN CSC Victoria, B.C. Canada, V8W 3P6
Email: mstorey@uvic.ca
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Complete list of publications - Alberto Bacchelli

Peer-reviewed conferences are accepted in software engineering as high-quality scholarly articles. This point is expressed in the article “Research Evaluation for Computer Science” in *Communications of the ACM* (April 2009).¹

The ACM/IEEE International Conference on Software Engineering (ICSE) and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE) are considered the most prestigious conferences, with the highest standards in the software engineering field.² I have published 12 papers in the main tracks at ICSE and FSE, of which two have been nominated for an ACM SIGSOFT Distinguished Paper Award (ICSE 2013, FSE 2018), one has received an ACM SIGSOFT Distinguished Artifact Award (ICSE 2020), and two have received an ACM SIGSOFT Distinguished Paper Award (ICSE 2016, ICSE 2021).

The ACM CHI Conference on Human Factors in Computing Systems (CHI) and ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) are considered the most prestigious conferences, with the highest standards in the human computer interaction field. I have published 3 papers in the main tracks at CHI and CSCW, of which one has received a best paper honorable mention (CSCW 2018) and one has received a best paper award (CSCW 2015).

According to Google scholar (Apr 19, 2021), my h-index is 31 with 3,930 citations showing an upward trend.

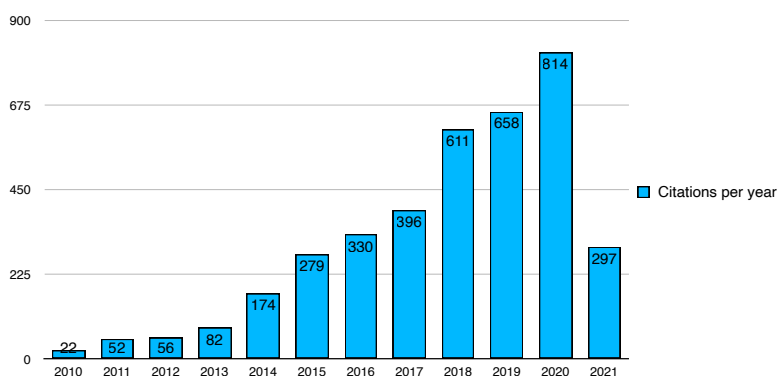


Figure 1: Citations per year, according to Google Scholar on Apr 19, 2021.

international peer-reviewed conference papers

[ICSE 2021] Why don't Developers Detect Improper Input Validation?; DROP TABLE Papers; –

Larissa Braz, Enrico Fregnan, Gül Çalikli, Alberto Bacchelli
43rd ACM/IEEE International Conference on Software Engineering, p. xxx, 2021
ACM SIGSOFT Distinguished Paper Award

[CHI 2020] UI Dark Patterns and Where to Find Them

Linda Di Geronimo, Larissa Braz, Fabio Palomba, Enrico Fregnan, Alberto Bacchelli
ACM CHI Conference on Human Factors in Computing Systems, pp. 1–14, 2020

[ICSE 2020] Primers or Reminders? The Effects of Existing Review Comments on Code Review

Davide Spadini, Gül Çalikli, Alberto Bacchelli
42nd ACM/IEEE International Conference on Software Engineering, pp. 1171–1182, 2020
ACM SIGSOFT Distinguished Artifact Award

[MSR 2020] Investigating Severity Thresholds for Test Smells

Davide Spadini, Martin Schvarcbacher, Ana Oprescu, Magiel Bruntink, Alberto Bacchelli
17th International Conference on Mining Software Repositories, forthcoming, 2020

[ICSE 2019] When Code Completion Fails: A Case Study On Real-World Completions

Vincent Hellendoorn, Sebastian Proksch, Harald C. Gall, Alberto Bacchelli
41st ACM/IEEE International Conference on Software Engineering, pp. 960–970, 2019

¹This point is also underlined by Michael D. Ernst (Professor at the University of Washington, and previously researcher at Microsoft Research and tenured professor at MIT): “conference papers are arguably more prestigious than journal publications: oftentimes, conferences have higher standards and lower acceptance rates.” For a copy: <http://sback.it/other/ernst-conf-vs-journal-uscis.pdf>.

²This is also expressed in the article: “Automatic and versatile publications ranking for research institutions and scholars” in *Comm. of the ACM* (June 2007)

- [ICSE 2019] Test-Driven Code Review: An Empirical Study
Davide Spadini, Fabio Palomba, Tobias Baum, Stefan Hanenberg, Magiel Bruntink, [Alberto Bacchelli](#)
41st ACM/IEEE International Conference on Software Engineering, pp. 1061–1072, 2019
- [MSR 2019 - Tool] PathMiner: A Library for Mining of Path-Based Representations of Code
Vladimir Kovalenko, Egor Bogomolov, Timofey Bryksin, [Alberto Bacchelli](#)
16th International Conference on Mining Software Repositories, pp. 13–17, 2019
- [MSR 2019] On the Effectiveness of Manual and Automatic Unit Test Generation: Ten Years Later
Domenico Serra, Giovanni Grano, Fabio Palomba, Filomena Ferrucci, Harald C. Gall, [Alberto Bacchelli](#)
16th International Conference on Mining Software Repositories, pp. 121–125, 2019
- [ESEC/FSE 2019] Understanding Flaky Tests: The Developer’s Perspective
Moritz Eck, Fabio Palomba, Marco Castelluccio, [Alberto Bacchelli](#)
27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, pp. 830–840, 2019
- [CSCW 2018] Information Needs in Contemporary Code Review
Luca Pascarella, Davide Spadini, Fabio Palomba, Magiel Bruntink, [Alberto Bacchelli](#)
21st ACM conference on Computer-Supported Cooperative Work and Social Computing, 135:1–135:27, 2018
Best Paper Honorable Mention
- [MOBILESoft 2018] Self-reported activities of Android developers
Luca Pascarella, Fabio Palomba, Franz-Xaver Geiger, Dario Di Nucci, Ivano Malavolta, [Alberto Bacchelli](#)
5th International Conference on Mobile Software Engineering and Systems, pp. 144–155, 2018
- [ICSE 2018 - SEIP] Modern Code Review: A Case Study at Google
Caitlin Sadowski, Emma Söderberg, Luke Church, Michal Sipko, [Alberto Bacchelli](#)
40th ACM/IEEE International Conference on Software Engineering, Software Engineering in Practice Track, pp. 181–190, 2018
- [ICSE 2018] Understanding Developers’ Needs on Deprecation as a Language Feature
Anand Ashok Sawant, Mauricio Aniche, Arie van Deursen, [Alberto Bacchelli](#)
40th ACM/IEEE International Conference on Software Engineering, pp. 561–571, 2018
- [ICSE 2018] When Testing Meets Code Review: Why and How Developers Review Tests
Davide Spadini, Mauricio Aniche, Margaret Storey, Magiel Bruntink, [Alberto Bacchelli](#)
40th ACM/IEEE International Conference on Software Engineering, pp. 677–687, 2018
- [ICSME 2018] On The Relation of Test Smells to Software Code Quality
Davide Spadini, Fabio Palomba, Andy Zaidman, Magiel Bruntink, [Alberto Bacchelli](#)
34th IEEE International Conference on Software Maintenance and Evolution, pp. 1–12, 2018
- [ICSME 2018] Why are features deprecated? An investigation into the motivation behind deprecation
Anand Ashok Sawant, Guangzhe Huanag, Gabriel Vilen, Stefan Stojkovski, [Alberto Bacchelli](#)
34th IEEE International Conference on Software Maintenance and Evolution, pp. 13–24, 2018
- [ASE 2018] Mining File Histories: Should We Consider Branches?
Vladimir Kovalenko, Fabio Palomba, [Alberto Bacchelli](#)
33rd IEEE/ACM International Conference on Automated Software Engineering, pp. 202–213, 2018
- [ASE 2018 - New Ideas] Continuous Code Quality: Are We (Really) Doing That?
Carmine Vassallo, Fabio Palomba, [Alberto Bacchelli](#), Harald C. Gall
33rd IEEE/ACM International Conference on Automated Software Engineering, New Ideas Track, pp. 790–795, 2018
- [MSR 2018 - Data] A graph-based dataset of commit history of real-world Android apps
Franz-Xaver Geiger, Ivano Malavolta, Luca Pascarella, Fabio Palomba, Dario Di Nucci, [Alberto Bacchelli](#)
15th International Conference on Mining Software Repositories, Data Track, pp. 30–33, 2018
- [MSR 2018] How Is Video Game Development Different from Software Development in Open Source?
Luca Pascarella, Fabio Palomba, Massimiliano Di Penta, [Alberto Bacchelli](#)
15th International Conference on Mining Software Repositories, pp. 392–402, 2018
- [ESEC/FSE 2018] What Makes A Code Change Easier To Review: An Empirical Investigation On Code Change Reviewability
Achyudh Ram, Anand Ashok Sawant, Marco Castelluccio, [Alberto Bacchelli](#)
26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, pp. 201–212, 2018
Nominated for ACM SIGSOFT Distinguished Paper Award
- [ESEC/FSE 2018 - Tool Demo] PyDriller: Python framework for mining software repositories
Davide Spadini, Maurício Finavaro Aniche, [Alberto Bacchelli](#)

[SANER 2018] Re-evaluating method-level bug prediction

Luca Pascarella, Fabio Palomba, [Alberto Bacchelli](#)

25th International Conference on Software Analysis, Evolution and Reengineering, RENE track, pp. 592–601, 2018

[ICSE 2017 - Introspection] Double-blind review in software engineering venues: the community’s perspective

[Alberto Bacchelli](#), Moritz Beller

39th ACM/IEEE International Conference on Software Engineering (Companion Volume), pp. 385–396, 2017

[ICSME 2017] On the Optimal Order of Reading Source Code Changes for Review

Tobias Baum, Kurt Schneider, [Alberto Bacchelli](#)

33rd IEEE International Conference on Software Maintenance and Evolution, pp. 329–340, 2017

[MSR 2017] Classifying code comments in Java open-source software systems

Luca Pascarella, [Alberto Bacchelli](#)

14th International Conference on Mining Software Repositories, pp. 227–237, 2017

ACM SIGSOFT Distinguished Paper Award

[MSR 2017] To mock or not to mock? An empirical study on mocking practices

Davide Spadini, Mauricio Aniche, Magiel Bruntink, [Alberto Bacchelli](#)

14th International Conference on Mining Software Repositories, pp. 402–412, 2017

[ESEM 2016] Social Diversity and Activity Levels of Open Source Software Projects on GitHub

Joop Aué, Michiel Haisma, Kristin Fjola Tomasdottir, [Alberto Bacchelli](#)

10th International Symposium on Empirical Software Engineering and Measurement, 41:1–41:6, 2016

[GECCO 2016] A Search-based Training Algorithm for Cost-aware Defect Prediction

Annibale Panichella, Carol V. Alexandru, Sebastiano Panichella, [Alberto Bacchelli](#), Harald C. Gall

Genetic and Evolutionary Computation Conference, pp. 1077–1084, 2016

[ICSE 2016] Work Practices and Challenges in Pull-Based Development: The Contributor’s Perspective

Georgios Gousios, Margaret-Anne Storey, [Alberto Bacchelli](#)

38th ACM/IEEE International Conference on Software Engineering, pp. 285–296, 2016

ACM SIGSOFT Distinguished Paper Award

[ICSE 2016] On the “Naturalness” of Buggy Code

Baishakhi Ray, Vincent Hellendoorn, Saheel Godhane, Zhaopeng Tu, [Alberto Bacchelli](#), Premkumar Devanbu

38th ACM/IEEE International Conference on Software Engineering, pp. 428–439, 2016

[ICSME 2016] On the reaction to deprecation of 25,357 clients of 4+1 popular Java APIs

Anand Sawant, Romain Robbes, [Alberto Bacchelli](#)

32nd International Conference on Software Maintenance and Evolution, pp. 400–410, 2016

Nominated for Best Paper Award

[SCAM 2016] A Security Perspective on Code Review: The Case of Chromium.

Marco Biase, Magiel Bruntink, [Alberto Bacchelli](#)

16th IEEE International Working Conference on Source Code Analysis and Manipulation, pp. 21–30, 2016

[FSE 2016 - Tool Demo] Visualizing code and coverage changes for code review

Sebastiaan Oosterwaal, Arie Deursen, Roberta Coelho, Anand Ashok Sawant, [Alberto Bacchelli](#)

24th ACM SIGSOFT International Symposium on Foundations of Software Engineering, pp. 1038–1041, 2016

[CSCW 2015] Supporting Developers’ Coordination in the IDE

Anja Guzzi, [Alberto Bacchelli](#), Yann Riche, Arie van Deursen

18th ACM conference on Computer-Supported Cooperative Work and Social Computing, pp. 518–532, 2015

Best Paper Award

[MSR 2015] Will they like this? Evaluating Code Contributions With Language Models

Vincent Hellendoorn, Premkumar Devanbu, [Alberto Bacchelli](#)

12th Working Conference on Mining Software Repositories, pp. 157–167, 2015

[MSR 2015 - Data] A Dataset For API Usage

Anand Sawant, [Alberto Bacchelli](#)

12th Working Conference on Mining Software Repositories, Data Track, pp. 506–509, 2015

[SANER 2015] Untangling Fine-Grained Code Changes

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Luca Ponzanelli, Andrea Mocci, [Alberto Bacchelli](#), Michele Lanza
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- [CSMR 2013] Leveraging Crowd Knowledge for Software Comprehension and Development
Luca Ponzanelli, [Alberto Bacchelli](#), Michele Lanza
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- [ICSE 2013] Expectations, Outcomes, and Challenges of Modern Code Review
[Alberto Bacchelli](#), Christian Bird
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[Alberto Bacchelli](#)
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[Alberto Bacchelli](#), Marco D'Ambros, Michele Lanza
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