

# Christoph Treude, PhD

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## Experience

**From 2024:** Associate Professor of Computer Science, *Singapore Management University, Singapore*  
**2021 – 2023:** Senior Lecturer, *University of Melbourne, Australia*  
**2019 – 2021:** Director of Internationalisation, *School of Computer Science, University of Adelaide, Australia*  
**2018 – 2020:** ARC DECRA Fellow, *University of Adelaide, Australia*  
**2017 – 2018:** JSPS Fellow, Short-Term, *Nara Institute of Science and Technology (NAIST), Japan*  
**2016 – 2021:** Senior Lecturer, *University of Adelaide, Australia*  
**2015 – 2016:** Researcher, *Universidade de São Paulo, Brazil*  
**2014 – 2015:** Researcher, *Universidade Federal do Rio Grande do Norte, Brazil*  
**2012 – 2014:** Postdoctoral Researcher, *McGill University, Canada*

## Education

**2022:** Graduate Certificate in University Teaching, *University of Melbourne, Australia*  
**2007 – 2012:** PhD in Computer Science, *University of Victoria, Canada*  
**2005 – 2006:** Exchange student, *University of British Columbia, Canada*  
**2000 – 2007:** *Diplom* in Computer Science/Management Information Systems, *Universität Siegen, Germany*

## Awards

**2024:** Distinguished Reviewer Award at FSE 2024  
**2024:** Best Reviewer Award at TechDebt 2024  
**2022:** Distinguished Reviewer Award at ESEC/FSE 2022  
**2021:** ACM SIGSOFT Distinguished Paper Award at ICSE 2021 (*with Kaibo Cao, Chunyang Chen, Sebastian Baltes, and Xiang Chen*)  
**2021:** Best Paper Award at TechDebt 2021 (*with Rodrigo Rebouças de Almeida, Rafael do Nascimento Ribeiro, and Uirá Kulesza*)

**2019:** ACM SIGSOFT Distinguished Paper Award at ASE 2019 (*with Zhongxin Liu, Xin Xia, David Lo, and Shanping Li*)

**2019:** Best Paper Award at ESEM 2019 (*with Emillie Thiselton*)

**2017:** Distinguished Reviewer Award for Outstanding Service as a Reviewer for the Journal on Empirical Software Engineering

**2015:** Best Paper Award at SBSC 2015 (*with Renato Ferreira, Muller Miranda, Fernando Figueira Filho, Cleidson de Souza, and Leif Singer*)

**2013:** Most Promising Idea Award at ICPC 2013 (*with Chris Parnin and Margaret-Anne Storey*)

## Research Support Income

<b>2021 – 2022:</b> Facebook Research Award,	AUD 125,000
<b>2021 – 2022:</b> Defence Innovation Partnership Grant, Phase 2	AUD 150,000
<b>2021:</b> University of Melbourne Start-up funding,	AUD 80,000
<b>2020 – 2021:</b> Google Faculty Research Award,	AUD 60,000
<b>2020 – 2021:</b> Defence Innovation Partnership Grant, Phase 1	AUD 20,000
<b>2018 – 2020:</b> ARC Discovery Early Career Researcher Award (DECRA),	AUD 361,446
<b>2018 – 2019:</b> NC State - University of Adelaide Starter Grant,	AUD 23,000
<b>2018:</b> University of Adelaide DVCR Establishment Grant,	AUD 25,000
<b>2018:</b> PSCI Key Partnerships Grant with HIT, China,	AUD 8,000
<b>2017 – 2018:</b> Short-term Fellowship, the Japan Society for the Promotion of Science,	AUD 8,000
<b>2017:</b> University of Adelaide Overseas Conference Leave funding,	AUD 3,500
<b>2016 – 2017:</b> University of Adelaide Start-up funding,	AUD 36,000
<b>2016:</b> University of Adelaide Overseas Conference Leave funding,	AUD 2,500
<b>2015:</b> Post-doctoral Fellowship, FAPESP, São Paulo Research Foundation,	AUD 60,000
<b>2014 – 2015:</b> Young Talents Fellowship, CNPq's Science Without Borders program,	AUD 70,000
<b>2014:</b> CNPq Universal Grant,	AUD 8,000
<b>2008 – 2011:</b> IBM CAS PhD fellowship,	AUD 90,000
<b>2007 – 2008:</b> University of Victoria PhD fellowship,	AUD 30,000
<b>2005 – 2006:</b> Scholarship from SAP AG under Holderlin program,	AUD 8,000

## Service to the Community

**FSE 2026:** Program Co-Chair, with Julia Lawall

**ICSE 2024:** Area Chair for Human and Social Aspects

**MSR 2024:** Mining Challenge Co-Chair, with Tao Xiao, Hideaki Hata, and Kenichi Matsumoto

**ICPC 2023:** General Chair

**TechDebt 2023:** General Chair

**ICSE 2023:** Conference Treasurer

**ESEC/FSE 2023:** Tool Demo Track Co-Chair, with Roshanak Moghaddam

**ICSE 2022:** New Ideas Track Co-Chair, with Liliana Pasquale

**ICPC 2021:** Journal First Track Co-Chair, with Neil Ernst

**ICSME 2020:** General Co-Chair, with Hongyu Zhang

**ICSME:** Chair of the Steering Committee (member 2020 – 2023, chair 2021 – 2023)

**IEEE Transactions on Software Engineering:** Associate Editor

**Empirical Software Engineering journal:** Editorial Board member

**Journal of Systems and Software:** Open Science Editor

**ACM Transactions on Software Engineering and Methodology:** Member of Board of Distinguished Reviewers

**Empirical Software Engineering journal:** Guest Editor “Collective Knowledge in Software Engineering”

**Empirical Software Engineering journal:** Guest Editor “Recommendation Systems for Software Engineering”

**IEEE Software:** Guest Editor “20 Years of Open Source—Impact on Software Engineering Practice”

**IEEE Software Blog:** Associate Editor (Human Factors)

**MSR 2019:** Mining Challenge Co-Chair, with Sebastian Baltes and Stephan Diehl

**IWESEP 2018:** Program Co-Chair, with Raula Kula

**ICSE 2014:** Publicity Chair

## Publications

2025

H. Gao, **C. Treude**, and M. Zahedi. Adapting Installation Instructions in Rapidly Evolving Software Ecosystems. In *IEEE Transactions on Software Engineering*, 2025. To appear.

J. He, **C. Treude**, and D. Lo. LLM-Based Multi-Agent Systems for Software Engineering: Literature Review, Vision and the Road Ahead. In *ACM Transactions on Software Engineering and Methodology*, 2025. To appear.

T. Ahmed, P. Devanbu, **C. Treude**, and M. Pradel. Can LLMs Replace Manual Annotation of Software Engineering Artifacts? In *MSR '25: Proceedings of the 22nd International Conference on Mining Software Repositories*, 2025. To appear.

(ACM SIGSOFT Distinguished Paper)

H. Y. Lin, C. Liu, H. Gao, P. Thongtanunam, and **C. Treude**. The Code Review Comprehension Assessment for Language Models. In *ACL '25: Findings of the Association for Computational Linguistics*, 2025. To appear.

A. Torres, M. Wagner, **C. Treude**, and S. Baltes. Information-theoretic detection of unusual source code changes. In *Empirical Software Engineering*, 2025. To appear.

Z. Hassan, **C. Treude**, M. Norrish, G. Williams, and A. Potanin. Characterising reproducibility debt in scientific software: A systematic literature review. In *Journal of Systems and Software*, 2025. To appear.

H. Ahmad, **C. Treude**, M. Wagner, and C. Szabo. Towards Resource-Efficient Reactive and Proactive Auto-Scaling for Microservice Architectures. In *Journal of Systems and Software*, 2025. To appear.

**C. Treude** and M. A. Gerosa. How Developers Interact with AI: A Taxonomy of Human-AI Collaboration in Software Engineering. In *Forge '25: Proceedings of the 2nd International Conference on AI Foundation Models and Software Engineering*, 2025. To appear.

M. Cheong, S. Abuzo, H. Hata, P. Kevin, W. Kula, B. Mirou, **C. Treude**, D. Wang, and R. G. Kula. Building Bridges across Papua New Guinea's Digital Divide in Growing the ICT Industry. In *SEiGS '25: Symposium on Software Engineering in the Global South*, 2025. To appear.

**C. Treude** and C. M. Poskitt. Bot-Driven Development: From Simple Automation to Autonomous Software Development Bots. In *BotSE '25: Proceedings of the 7th International Workshop on Bots in Software Engineering*, 2025. To appear.

## 2024

Y. Jiang, Y. Zhang, X. Su, **C. Treude**, and T. Wang. StagedVulBERT: Multi-Granular Vulnerability Detection with a Novel Pre-trained Code Model. In *IEEE Transactions on Software Engineering*, 2024. To appear.

Y. Fan, T. Xiao, H. Hata, **C. Treude**, and K. Matsumoto. "My GitHub Sponsors profile is live!" Investigating the Impact of Twitter/X Mentions on GitHub Sponsors. In *ICSE '24: Proceedings of the 46th International Conference on Software Engineering*, 2024. To appear.

T. Xiao, H. Hata, **C. Treude**, and K. Matsumoto. Generative AI for Pull Request Descriptions: Adoption, Impact, and Developer Interventions. In *FSE '24: Proceedings of the ACM on Software Engineering (PACMSE), Issue FSE 2024*, 2024. To appear.

H. Gao, M. Zahedi, **C. Treude**, S. Rosenstock, and M. Cheong. Documenting Ethical Considerations in Open Source AI Models. In *ESEM '24: 18th International Symposium on Empirical Software Engineering and Measurement*, 2024. To appear.

A. Galappaththi, S. Nadi, and **C. Treude**. An Empirical Study of API Misuses of Data-Centric Libraries. In *ESEM '24: 18th International Symposium on Empirical Software Engineering and Measurement*, 2024. To appear.

W. Charoenwet, P. Thongtanunam, T. Pham, and **C. Treude**. Toward Effective Secure Code Reviews: An Empirical Study of Security-Related Coding Weaknesses. In *Empirical Software Engineering*, 2024. To appear.

- J. Caddy, **C. Treude**, M. Wagner, and E. T. Barr. The Role of Surprisal in Issue Trackers. In *Empirical Software Engineering*, 2024. To appear.
- Y. Fan, D. Wang, S. Wattanakriengkrai, H. Damrongsiri, **C. Treude**, H. Hata, and R. Kula. Developer Reactions to Protestware in Open Source Software: The cases of color.js and es5.ext. In *Empirical Software Engineering*, 2024. To appear.
- W. Charoenwet, P. Thongtanunam, T. Pham, and **C. Treude**. An Empirical Study of Static Analysis Tools for Secure Code Review. In *ISSTA '24: Proceedings of the 33rd International Symposium on Software Testing and Analysis*, 2024. To appear.
- H. Ahmad, **C. Treude**, M. Wagner, and C. Szabo. Smart HPA: A Resource-Efficient Horizontal Pod Auto-scaler for Microservice Architectures. In *ICSA '24: Proceedings of the 21st International Conference on Software Architecture*, 2024. To appear.
- M. Medeiros, U. Kulesza, R. Coelho, R. Bonifacio, **C. Treude**, and E. A. Barbosa. The Impact Of Bug Localization Based on Crash Report Mining: A Developers' Perspective. In *ICSE '24: Proceedings of the 46th International Conference on Software Engineering - SEIP track*, 2024. To appear.
- F. Zanartu, **C. Treude**, and M. Wagner. Socialz: Multi-Feature Social Fuzz Testing. In *GECCO '24: Proceedings of the Genetic and Evolutionary Computation Conference*, 2024. To appear.
- M. Bano, R. Hoda, D. Zowghi, and **C. Treude**. Large Language Models for Qualitative Research in Software Engineering: Exploring Opportunities and Challenges. In *Automated Software Engineering*, 2024. To appear.
- M. Cheong, R. Kula, and **C. Treude**. Ethical Considerations Towards Protestware. In *IEEE Software*, 2024. To appear.
- Y. Fan, A. Hovhannisyan, H. Hata, **C. Treude**, and R. Kula. The Impact of Sanctions on GitHub Developers and Activities. In *IEEE Software*, 2024. To appear.
- R. Garcia, **C. Treude**, and A. Valentine. Application of Collaborative Learning Paradigms within Software Engineering Education: A Systematic Mapping Study. In *SIGCSE '24: Proceedings of the 55th Technical Symposium on Computer Science Education*, 2024. To appear.
- C. Arora, A. Ibn Sayeed, S. Licorish, F. Wang, and **C. Treude**. Optimizing LLMs for Code Generation: Which Hyperparameter Settings Yield the Best Results? In *APSEC '24: Proceedings of the 31st Asia-Pacific Software Engineering Conference*, 2024. To appear.
- L. Todd, J. Grundy, and **C. Treude**. GitHubInclusifier: Finding and fixing non-inclusive language in GitHub Repositories. In *ICSE '24: Proceedings of the 46th International Conference on Software Engineering - Demo track*, 2024. To appear.
- Z. Hassan, **C. Treude**, M. Norrish, G. Williams, and A. Potanin. Reproducibility Debt: Challenges and Future Pathways. In *FSE '24: Proceedings of the Symposium on the Foundations of Software Engineering – Vision Track*, 2024. To appear.
- O. Manglaras, A. Farkas, P. Fule, **C. Treude**, and M. Wagner. MicroKarta: Visualising Microservice Architectures. In *FSE '24: Proceedings of the Symposium on the Foundations of Software Engineering – Demo Track*, 2024. To appear.
- T. Nakano, K. Shimari, R. Kula, **C. Treude**, M. Cheong, and K. Matsumoto. Nigerian Software Engineer or American Data Scientist? GitHub Profile Recruitment Bias in Large Language Models. In *ICSME '24: Proceedings of the 40th International Conference on Software Maintenance and Evolution – NIER track*, 2024. To appear.

S. Blyth, **C. Treude**, and M. Wagner. Creative and Correct: Requesting Diverse Code Solutions from AI Foundation Models. In *FORGE '24: Proceedings of the 1st International Conference on AI Foundation Models and Software Engineering*, 2024. To appear.

H. Y. Lin, P. Thongtanunam, **C. Treude**, and W. Charoenwet. Improving Automated Code Reviews: Learning From Experience. In *MSR '24: Proceedings of the 21st International Conference on Mining Software Repositories*, 2024. To appear.

H. Nguyen, **C. Treude**, and P. Thongtanunam. Encoding Version History Context for Better Code Representation. In *MSR '24: Proceedings of the 21st International Conference on Mining Software Repositories*, 2024. To appear.

D. Garijo, M. Arroyo, E. González Guardia, **C. Treude**, and N. Tarocco. Bidirectional Paper-Repository Tracing in Software Engineering. In *MSR '24: Proceedings of the 21st International Conference on Mining Software Repositories – Data track*, 2024. To appear.

X. Guan and **C. Treude**. Enhancing Source Code Representations for Deep Learning with Static Analysis. In *ICPC '24: Proceedings of the 32nd International Conference on Program Comprehension – ERA track*, 2024. To appear.

J. Caddy and **C. Treude**. Prioritising GitHub Priority Labels. In *PROMISE '24: Proceedings of the 20th International Conference on Predictive Models and Data Analytics in Software Engineering*, 2024. To appear.

## 2023

B. Reid, M. d'Amorim, M. Wagner, and **C. Treude**. NCQ: Code reuse support for Node.js developers. In *IEEE Transactions on Software Engineering*, 2023. To appear.

H. Gao, **C. Treude**, and M. Zahedi. Evaluating Transfer Learning for Simplifying GitHub READMEs. In *ESEC/FSE '23: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2023. To appear.

F. Fronchetti, D. Shepherd, I. Wiese, **C. Treude**, M. Gerosa, and I. Steinmacher. Do CONTRIBUTING files provide information about OSS newcomers' onboarding barriers? In *ESEC/FSE '23: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2023. To appear.

V. Maeprasart, S. Wattanakriengkrai, R. Kula, **C. Treude**, and K. Matsumoto. Understanding the Role of External Pull Requests in the NPM Ecosystem. In *Empirical Software Engineering*, 2023. To appear.

T. Xiao, S. Baltes, H. Hata, **C. Treude**, R. Kula, T. Ishio, and K. Matsumoto. 18 Million Links in Commit Messages: Purpose, Evolution, and Decay. In *Empirical Software Engineering*, 2023. To appear.

J. H. Bernardo, D. A. da Costa, U. Kulesza, and **C. Treude**. The Impact of a Continuous Integration Service on the Delivery Time of Merged Pull Requests. In *Empirical Software Engineering*, 2023. To appear.

M. Wessel, J. Vargovich, M. A. Gerosa, and **C. Treude**. GitHub Actions: The Impact on the Pull Request Process. In *Empirical Software Engineering*, 2023. To appear.

G. Guizzo, J. M. Zhang, F. Sarro, **C. Treude**, and M. Harman. Mutation Analysis for Evaluating Code Translation. In *Empirical Software Engineering*, 2023. To appear.

W. S. Tan, M. Wagner, and **C. Treude**. Detecting Outdated Code Element References in Software Repository Documentation. In *Empirical Software Engineering*, 2023. To appear.

- Y. Jiang, X. Su, **C. Treude**, C. Shang, and T. Wang. Does Deep Learning improve the performance of duplicate bug report detection? An empirical study. In *Journal of Systems and Software*, 2023. To appear.
- S. Ferino, M. Fernandes, E. Cirilo, L. Agnez, B. Batista, U. Kulesza, E. Aranha, and **C. Treude**. Overcoming Challenges in DevOps Education through Teaching Methods. In *ICSE '23: Proceedings of the 45th International Conference on Software Engineering – SEET track*, 2023. To appear.
- L. Salerno, S. de França Tonhão, I. Steinmacher, and **C. Treude**. Barriers and Self-Efficacy: A Large-Scale Study on the Impact of OSS Courses on Student Perceptions. In *ITiCSE '23: Proceedings of the 28th Annual ACM Conference on Innovation and Technology in Computer Science Education*, 2023. To appear.
- D. Wang, T. Xiao, **C. Treude**, R. Kula, H. Hata, and Y. Kamei. Understanding the Role of Images on Stack Overflow. In *MSR '23: Proceedings of the 20th International Conference on Mining Software Repositories*, 2023. To appear.
- B. Reid, **C. Treude**, and M. Wagner. Using the TypeScript compiler to fix erroneous Node.js snippets. In *SCAM '23: Proceedings of the 23rd International Working Conference on Source Code Analysis and Manipulation*, 2023. To appear.
- O. Manglaras, A. Farkas, P. Fule, **C. Treude**, and M. Wagner. Problems in Microservice Development: Supporting Visualisation. In *VISSOFT '23: Proceedings of the 11th Working Conference on Software Visualization*, 2023. To appear.
- S. Wattanakriengkrai, R. Kula, **C. Treude**, and K. Matsumoto. Lessons from the Long Tail: Analysing Unsafe Dependency Updates across Software Ecosystems. In *ESEC/FSE '23: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering – Ideas, Visions, and Reflections track*, 2023. To appear.
- C. Treude** and H. Hata. She Elicits Requirements and He Tests: Software Engineering Gender Bias in Large Language Models. In *MSR '23: Proceedings of the 20th International Conference on Mining Software Repositories*, 2023. To appear.
- W. S. Tan, M. Wagner, and **C. Treude**. Wait, wasn't that code here before? Detecting Outdated Software Documentation. In *ICSME '23: Proceedings of the 39th International Conference on Software Maintenance and Evolution - Tool track*, 2023. To appear.
- S. Baltes, B. Pfitzmann, T. Kowark, **C. Treude**, and F. Beck. Visually Analyzing Company-wide Software Service Dependencies: An Industrial Case Study. In *VISSOFT '23: Proceedings of the 11th Working Conference on Software Visualization*, 2023. To appear.
- R. Garcia, **C. Treude**, and W. La. Towards Understanding the Open Source Interest in Gender-Related GitHub Projects. In *CHASE '23: Proceedings of the 16th International Workshop on Cooperative and Human Aspects of Software Engineering*, 2023. To appear.
- R. Rebouças de Almeida, **C. Treude**, and U. Kulesza. What's behind tight deadlines? Business causes of technical debt. In *CHASE '23: Proceedings of the 16th International Workshop on Cooperative and Human Aspects of Software Engineering*, 2023. To appear.
- C. Treude**. Navigating Complexity in Software Engineering: A Prototype for Comparing GPT-n Solutions. In *BotSE '23: Proceedings of the 5th International Workshop on Bots in Software Engineering*, 2023. To appear.
- Y. Fan, C. Arora, and **C. Treude**. Stop Words for Processing Software Engineering Documents: Do they Matter? In *NLBSE '23: Proceedings of the 2nd Workshop on Natural Language-based Software Engineering*, 2023. To appear.

A. Torres, S. Baltes, **C. Treude**, and M. Wagner. Applying information theory to software evolution. In *NLBSE '23: Proceedings of the 2nd Workshop on Natural Language-based Software Engineering*, 2023. To appear.

2022

S. Wattanakriengkrai, D. Wang, R. Kula, **C. Treude**, P. Thongtanunam, T. Ishio, and K. Matsumoto. Giving Back: Contributions Congruent to Library Dependency Changes in a Software Ecosystem. In *IEEE Transactions on Software Engineering*, 2022. To appear.

N. Shimada, T. Xiao, H. Hata, **C. Treude**, K. Matsumoto. GitHub Sponsors: Exploring a New Way to Contribute to Open Source. In *ICSE '22: Proceedings of the 44th International Conference on Software Engineering*, 2022. To appear.

N. Zhang, C. Liu, X. Xia, **C. Treude**, Y. Zou, D. Lo, and Z. Zheng. ShellFusion: Answer Generation for Shell Programming Tasks via Knowledge Fusion. In *ICSE '22: Proceedings of the 44th International Conference on Software Engineering*, 2022. To appear.

M. Liu, X. Peng, A. Marcus, **C. Treude**, J. Xie, H. Xu, and Y. Yang. How to Formulate Specific How-To Questions in Software Development? In *ESEC/FSE '22: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2022. To appear. (Acceptance rate: 22%)

Y. Jiang, X. Su, **C. Treude**, and T. Wang. Hierarchical Semantic-Aware Neural Code Representation. In *Journal of Systems and Software*, 2022. To appear.

T. Wong, M. Wagner, and **C. Treude**. Self-Adaptive Systems: A Systematic Literature Review Across Categories and Domains. In *Information and Software Technology*, 2022. To appear.

A. Galappaththi, S. Nadi, and **C. Treude**. Does This Apply to Me? An Empirical Study of Technical Context in Stack Overflow. In *MSR '22: Proceedings of the 19th International Conference on Mining Software Repositories*, 2022. To appear. (Acceptance rate: 34%)

R. Garcia, C.-J. T. Liao, A. Pearce, and **C. Treude**. Gender Influence on Communication Initiated within Student Teams. In *SIGCSE '22: Proceedings of the 53rd Technical Symposium on Computer Science Education*, 2022. To appear.

M. Fernandes, S. Ferino, A. K. Fernandes, U. Kulesza, E. Aranha, and **C. Treude**. DevOps Education: An Interview Study of Challenges and Recommendations. In *ICSE '22: Proceedings of the 44th International Conference on Software Engineering – SEET track*, 2022. To appear.

**C. Treude**. Taming Multi-Output Recommenders for Software Engineering. In *ASE '22: Proceedings of the 37th International Conference on Automated Software Engineering*, 2022. To appear.

R. Kula and **C. Treude**. In War and Peace: The Impact of World Politics on Software Ecosystems. In *ESEC/FSE '22: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering – Ideas, Visions, and Reflections track*, 2022. To appear. (Acceptance rate: 25%)

F. Tian and **C. Treude**. Adding Context to Source Code Representations for Deep Learning. In *ICSME '22: Proceedings of the 38th International Conference on Software Maintenance and Evolution - NIER track*, 2022. To appear.



J. Caddy, M. Wagner, **C. Treude**, E. Barr, M. Allamanis. Is Surprisal in Issue Trackers Actionable? In *MSR '22: Proceedings of the 19th International Conference on Mining Software Repositories – RR track*, 2022. To appear.

B. Reid, M. Wagner, M. d'Amorim, and **C. Treude**. Software Engineering User Study Recruitment on Prolific: An Experience Report. In *RoPES '22: Proceedings of the 1st International Workshop on Recruiting Participants for Empirical Software Engineering*, 2022. To appear.

F. Ebert, A. Serebrenik, **C. Treude**, N. Novielli, and F. Castor. On Recruiting Experienced GitHub Contributors for Interviews and Surveys on Prolific. In *RoPES '22: Proceedings of the 1st International Workshop on Recruiting Participants for Empirical Software Engineering*, 2022. To appear.

## 2021

M. Aniche, **C. Treude**, and A. Zaidman. How Developers Engineer Test Cases: An Observational Study. In *IEEE Transactions on Software Engineering*, 2021. To appear.

M. Liu, X. Peng, A. Marcus, S. Xing, **C. Treude**, and C. Zhao. API-Related Developer Information Needs in Stack Overflow. In *IEEE Transactions on Software Engineering*, 2021. To appear.

K. Cao, C. Chen, S. Baltes, **C. Treude**, and X. Chen. Automated Query Reformulation for Efficient Search Based on Query Logs from Stack Overflow. In *ICSE '21: Proceedings of the 43rd International Conference on Software Engineering*, 2021. To appear.  
**(ACM SIGSOFT Distinguished Paper)**

H. Hata, R. Kula, T. Ishio, and **C. Treude**. Same File, Different Changes: The Potential of Meta-Maintenance on GitHub. In *ICSE '21: Proceedings of the 43rd International Conference on Software Engineering*, 2021. To appear.

M. Gerosa, I. Wiese, B. Trinkenreich, G. Link, G. Robles, **C. Treude**, I. Steinmacher, and A. Sarma. The Shifting Sands of Motivation: Revisiting What Drives Contributors in Open Source. In *ICSE '21: Proceedings of the 43rd International Conference on Software Engineering*, 2021. To appear.

M. Liu, X. Peng, A. Marcus, **C. Treude**, X. Bai, G. Lyu, J. Xie, and X. Zhang. Learning-based Extraction of First-Order Logic Representations of API Directives. In *ESEC/FSE '21: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2021. To appear.  
**(Acceptance rate: 24%)**

J. Liu, S. Baltes, **C. Treude**, D. Lo, Y. Zhang, and X. Xia. Characterizing Search Activities on Stack Overflow. In *ESEC/FSE '21: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2021. To appear.  
**(Acceptance rate: 24%)**

H. Hata, N. Novielli, S. Baltes, R. Kula, and **C. Treude**. GitHub Discussions: An Exploratory Study of Early Adoption. In *Empirical Software Engineering*, 2021. To appear.

R. Croft, Y. Xie, M. Zahedi, M. A. Babar, and **C. Treude**. An Empirical Study of Developers' Discussions about Security Challenges of Different Programming Languages. In *Empirical Software Engineering*, 2021. To appear.

S. Herbold, A. Trautsch, B. Ledel, A. Aghamohammadi, T. A. Ghaleb, K. Kaur Chahal, T. Bossenmaier, B. Nagaria, P. Makedonski, M. N. Ahmadabadi, K. Szabados, H. Spieker, M. Madeja, N. G. Hoy, V. Lenarduzzi, S. Wang, G. Rodríguez-Pérez, R. Colomo-Palacios, R. Verdecchia, P. Singh, Y. Qin, D. Chakroborti, W. Davis, V. Walunj, H. Wu, D. Marcilio, O. Alam, A. Aldaej, I. Amit, B. Turhan, S.

Eismann, A. Wickert, I. Malavolta, M. Sulír, F. Fard, A. Z. Henley, S. Kourtzanidis, E. Tüzün, **C. Treude**, S. M. Shamasbi, I. Pashchenko, M. Wyrich, J. C. Davis, A. Serebrenik, E. Albrecht, E. U. Aktas, D. Strüber, and J. Erbel. A Fine-grained Data Set and Analysis of Tangling in Bug Fixing Commits. In *Empirical Software Engineering*, 2021. To appear.

T. Kinsman, M. Wessel, M. Gerosa, and **C. Treude**. How Do Software Developers Use GitHub Actions to Automate Their Workflows? In *MSR '21: Proceedings of the 18th International Conference on Mining Software Repositories*, 2021. To appear.

**(Acceptance rate: 34%)**

M. Alghamdi, S. Hayashi, T. Kobayashi, and **C. Treude**. Characterising the Knowledge about Primitive Variables in Java Code Comments. In *MSR '21: Proceedings of the 18th International Conference on Mining Software Repositories*, 2021. To appear.

**(Acceptance rate: 34%)**

J. M. Florez, O. Chaparro, **C. Treude**, and A. Marcus. Combining Query Reduction and Expansion for Text-Retrieval-Based Bug Localization. In *SANER '21: Proceedings of the 28th International Conference on Software Analysis, Evolution, and Reengineering*, 2021. To appear.

S. Wattanakriengkrai, B. Chinthanet, H. Hata, R. Kula, **C. Treude**, J. Guo, and K. Matsumoto. GitHub Repositories with Links to Academic Papers: Public Access, Traceability, and Evolution. In *Journal of Systems and Software*, 2021. To appear.

L. Furtado, B. Cartaxo, **C. Treude**, and G. Pinto. How Successful Are Open Source Contributions From Countries with Different Levels of Human Development? In *IEEE Software*, 2021. To appear.

R. Kula, **C. Treude**, H. Hata, S. Baltes, I. Steinmacher, M. A. Gerosa, and W. Kula Amini. Challenges for Inclusion in Software Engineering: The Case of the Emerging Papua New Guinean Society. In *IEEE Software*, 2021. To appear.

R. Rebouças de Almeida, R. do Nascimento Ribeiro, **C. Treude**, and U. Kulesza. Business-Driven Technical Debt Prioritization: An Industrial Case Study. In *TechDebt '21: Proceedings of the 4th International Conference on Technical Debt*, 2021. To appear.

**(Best Paper)**

S. Islam, R. Kula, **C. Treude**, T. Ishio, and K. Matsumoto. Contrasting Third-Party Package Management User Experience. In *ICSME '21: Proceedings of the 37th International Conference on Software Maintenance and Evolution - NIER track*, 2021. To appear.

S. Ferino, M. Fernandes, A. K. Fernandes, U. Kulesza, E. Aranha, and **C. Treude**. Analyzing DevOps Teaching Strategies: An Initial Study. In *SBES '21: Proceedings of the 35th Brazilian Symposium on Software Engineering - IIER track*, 2021. To appear.

**(Distinguished Paper)**

S. A. Licorish, **C. Treude**, J. Grundy, K. Blincoe, S. MacDonell, C. Tantithamthavorn, L. Li, and J.-G. Schneider. Software Engineering in Australasia. In *SIGSOFT Software Engineering Notes* 46, 2, pages 16-17, 2021.

## 2020

S. Baltes, **C. Treude**, and M. P. Robillard. Contextual Documentation Referencing on Stack Overflow. In *IEEE Transactions on Software Engineering*, 2020. To appear.

P.-P. Pârțachi, S. Dash, **C. Treude**, and E. T. Barr. Posit: Simultaneously Tagging Natural and Programming Languages. In *ICSE '20: Proceedings of the 42nd International Conference on Software Engineering*, 2020. To appear.

W. Xie, X. Peng, M. Liu, **C. Treude**, Z. Xing, X. Zhang, and W. Zhao. API Method Recommendation via Explicit Matching of Functionality Verb Phrases. In *ESEC/FSE '20: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2020. To appear. (Acceptance rate: 28%)

J. Silva, I. Wiese, D. M. German, **C. Treude**, M. A. Gerosa, and I. Steinmacher. A Theory of the Engagement in Open Source Projects via Summer of Code Programs. In *ESEC/FSE '20: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2020. To appear. (Acceptance rate: 28%)

E. L. Vargas, M. Aniche, **C. Treude**, M. Bruntink, and G. Gousios. Selecting third-party libraries: The practitioners' perspective. In *ESEC/FSE '20: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, 2020. To appear. (Acceptance rate: 28%)

Y. Liu, M. Liu, X. Peng, **C. Treude**, Z. Xing, and X. Zhang. Generating Concept based API Element Comparison Using a Knowledge Graph. In *ASE '20: Proceedings of the 35th International Conference on Automated Software Engineering*, 2020. To appear. (Acceptance rate 22%)

M. P. Robillard and **C. Treude**. Understanding Wikipedia as a Resource for Opportunistic Learning of Computing Concepts. In *SIGCSE '20: Proceedings of the 51st Technical Symposium on Computer Science Education*, 2020. To appear.

J. Jiarpakdee, C. Tantithamthavorn, and **C. Treude**. The Impact of Automated Feature Selection Techniques on the Interpretation of Defect Models. In *Empirical Software Engineering*, 2020. To appear.

R. Maipradit, **C. Treude**, H. Hata, and K. Matsumoto. Wait For It: Identifying "On-Hold" Self-Admitted Technical Debt. In *Empirical Software Engineering*, 2020. To appear.

G. Pinto, B. Miranda, S. Dissanayake, M. d'Amorim, **C. Treude**, and A. Bertolino. What is the Vocabulary of Flaky Tests? In *MSR '20: Proceedings of the 17th International Conference on Mining Software Repositories*, 2020. To appear.

M. Alghamdi, **C. Treude**, and M. Wagner. Human-Like Summaries from Heterogeneous and Time-Windowed Software Development Artefacts. In *PPSN '20: Proceedings of the 16th International Conference on Parallel Problem Solving from Nature*, 2020. To appear.

J. O. Silva, I. Wiese, D. M. German, **C. Treude**, M. A. Gerosa, and I. Steinmacher. Google Summer of Code: Student Motivations and Contributions. In *Journal of Systems and Software*, 2020. To appear.

S. Nadi and **C. Treude**. Essential Sentences for Navigating Stack Overflow Answers. In *SANER '20: Proceedings of the 27th International Conference on Software Analysis, Evolution, and Reengineering*, 2020. To appear.

**C. Treude**, J. Middleton, and T. Atapattu. Beyond Accuracy: Assessing Software Documentation Quality. In *ESEC/FSE '20: Proceedings of the Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Visions and Reflections*, 2020. To appear. (Acceptance rate: 38%)

S. Baltes and **C. Treude**. Code Duplication on Stack Overflow. In *ICSE '20: Proceedings of the 42nd International Conference on Software Engineering, NIER track*, 2020. To appear. (Acceptance rate 30%)

I. Nunes, C. Treude, and F. Calefato. The Impact of Dynamics of Collaborative Software Engineering on Introverts: A Study Protocol. In *MSR '20: Proceedings of the 17th International Conference on Mining Software Repositories*, 2020. To appear.

L. F. Dias, C. Barbosa, G. Pinto, I. Steinmacher, B. Fonseca, M. Ribeiro, C. Treude, and D. A. da Costa. Refactoring from 9 to 5? What and When Employees and Volunteers Contribute to OSS. In *VL/HCC '20: Proceedings of the Symposium on Visual Languages and Human-Centric Computing*, 2020. To appear.

B. Reid, C. Treude, and M. Wagner. Optimising the Fit of Stack Overflow Code Snippets into Existing Code. In *GI@GECCO '20: Proceedings of the 9th International Workshop on Genetic Improvement*, 2020. To appear.

M. Herath, T. Atapattu, H. A. Dung, C. Treude, and K. Falkner. AdelaideCyC at SemEval-2020 Task 12: Ensemble of Classifiers for Offensive Language Detection in Social Media. In *SemEval@COLING '20: Proceedings of the 14th International Workshop on Semantic Evaluation*, 2020. To appear.

## 2019

H. Hata, C. Treude, R. G. Kula, and T. Ishio. 9.6 Million Links in Source Code Comments: Purpose, Evolution, and Decay. In *ICSE '19: Proceedings of the 41st International Conference on Software Engineering*, 2019. To appear.

**(Acceptance rate 21%)**

E. Thiselton and C. Treude. Enhancing Python Compiler Error Messages via Stack Overflow. In *ESEM '19: 12th International Symposium on Empirical Software Engineering and Measurement*, 2019. To appear.

**(Best paper; acceptance rate 20%)**

Z. Liu, X. Xia, C. Treude, D. Lo, and S. Li. Automatic Generation of Pull Request Descriptions. In *ASE '19: Proceedings of the 34th International Conference on Automated Software Engineering*, 2019. To appear.

**(ACM SIGSOFT Distinguished Paper; acceptance rate 23%)**

A. Sulistya, G. A. A. Prana, A. Sharma, D. Lo, and C. Treude. SIEVE: Helping Developers Sift Wheat from Chaff via Cross-Platform Analysis. In *Empirical Software Engineering*, 2019. To appear.

C. S. Yu, C. Treude, and M. Aniche. Comprehending Test Code: An Empirical Study. In *ICSME '19: Proceedings of the 35th International Conference on Software Maintenance and Evolution*, 2019. To appear.

**(Acceptance rate 23%)**

C. Treude and M. Wagner. Predicting Good Configurations for GitHub and Stack Overflow Topic Models. In *MSR '19: Proceedings of the 16th International Conference on Mining Software Repositories*, 2019. To appear.

**(Acceptance rate 25%)**

A. Alqaimi, P. Thongtanunam, and C. Treude. Automatically Generating Documentation for Lambda Expressions in Java. In *MSR '19: Proceedings of the 16th International Conference on Mining Software Repositories*, 2019. To appear.

**(Acceptance rate 25%)**

H. Melo, R. Coelho, and C. Treude. Unveiling Exception Handling Guidelines adopted by Java Developers. In *SANER '19: Proceedings of the 26th International Conference on Software Analysis, Evolution, and Reengineering*, 2019. To appear.

**(Acceptance rate 27%)**

I. S. Wiese, R. T. Kuroda, I. Steinmacher, G. A. Oliva, R. Ré, C. Treude, and M. A. Gerosa. Are Pieces of Contextual Information Suitable for Predicting Co-Changes? An Empirical Study. In *Software Quality Journal*, 2019. To appear.

M. Kelly, **C. Treude**, and A. Murray. A Case Study on Automated Fuzz Target Generation for Large Codebases. In *ESEM '19: 12th International Symposium on Empirical Software Engineering and Measurement*, 2019. To appear.

(Acceptance rate 35%)

R. Rebouças de Almeida, **C. Treude**, and U. Kulesza. Tracy: A Business-driven Technical Debt Prioritization Framework. In *ICSME '19: Proceedings of the 35th International Conference on Software Maintenance and Evolution*, 2019. To appear.

(Acceptance rate 56%)

M. Nassif, **C. Treude**, and M. P. Robillard. Witt: Querying Technology Terms based on Automated Classification. In *ICSE '19: Proceedings of the 41st International Conference on Software Engineering*, 2019. To appear.

(Acceptance rate 47%)

S. Baltes, **C. Treude**, and S. Diehl. SOTorrent: Studying the Origin, Evolution, and Usage of Stack Overflow Code Snippets. In *MSR' 19: Proceedings of the 16th International Conference on Mining Software Repositories*, 2019. To appear.

(Acceptance rate 33%)

M. Galster, **C. Treude**, and K. Blincoe. Supporting Software Architecture Maintenance by Providing Task-specific Recommendations. In *ICSME '19: Proceedings of the 35th International Conference on Software Maintenance and Evolution*, 2019. To appear.

M. Alghamdi, **C. Treude**, and M. Wagner. Toward Human-Like Summaries Generated from Heterogeneous Software Artefacts. In *GI@GECCO '19: Proceedings of the 7th International Workshop on Genetic Improvement*, 2019. To appear.

**C. Treude** and F. Figueira Filho. How Team Awareness Influences Perceptions of Developer Productivity. In *Rethinking Productivity in Software Engineering*, C. Sadowski and T. Zimmermann, Eds., 2019. To appear.

M.-A. Storey and **C. Treude**. Software Engineering Dashboards: Types, Risks, and Future. In *Rethinking Productivity in Software Engineering*, C. Sadowski and T. Zimmermann, Eds., 2019. To appear.

## 2018

M. Nassif, **C. Treude**, and M. P. Robillard. Automatically Categorizing Software Technologies. In *IEEE Transactions on Software Engineering*, 2018. To appear.

G. A. A. Prana, **C. Treude**, F. Thung, T. Atapattu, and D. Lo. Categorizing the Content of GitHub README Files. In *Empirical Software Engineering*, 2018. To appear.

D. A. da Costa, S. McIntosh, **C. Treude**, U. Kulesza, and A. E. Hassan. The Impact of Rapid Release Cycles on the Integration Delay of Fixed Issues. In *Empirical Software Engineering* 23, 2 (April 2018), pages 835-904, 2018.

**C. Treude**, L. Leite, and M. Aniche. Unusual Events in GitHub Repositories. In *Journal of Systems and Software*, 142 (August 2018), pages 237-247, 2018.

M. Aniche, **C. Treude**, I. Steinmacher, I. Wiese, G. H. L. Pinto, M.-A. Storey, and M. A. Gerosa. How Modern News Aggregators Help Development Communities Shape and Share Knowledge. In *ICSE '18: Proceedings of the 40th International Conference on Software Engineering*, 2018. To appear.

(Acceptance rate 21%)

J. Jiarpakdee, C. Tantithamthavorn, and **C. Treude**. AutoSpearman: Automatically Mitigating Correlated Software Metrics for Interpreting Defect Models. In *ICSME '18: Proceedings of the 34th International Conference on Software Maintenance and Evolution*, 2018. To appear.

**(Acceptance rate 26%)**

S. Baltes, L. Dumani, **C. Treude**, and S. Diehl. SOTorrent: Reconstructing and Analyzing the Evolution of Stack Overflow Posts. In *MSR '18: Proceedings of the 15th International Conference on Mining Software Repositories*, 2018. To appear.

**(Acceptance rate 33%)**

R. Rebouças de Almeida, U. Kulesza, **C. Treude**, A. Lima, and D. C. Feitosa. Aligning Technical Debt Prioritization with Business Objectives: A Multiple-case Study. In *ICSME '18: Proceedings of the 34th International Conference on Software Maintenance and Evolution, Industry track*, 2018. To appear.

**(Acceptance rate 47%)**

I. Steinmacher, **C. Treude**, and M. A. Gerosa. Let me in: Guidelines for the Successful Onboarding of Newcomers to Open Source Projects. In *IEEE Software*, 2018. To appear.

M. Zahedi, M. Ali Babar, and **C. Treude**. An Empirical Study of Security Issues Posted in Open Source Projects. In *HICSS '18: Proceedings of the 51st Hawaii International Conference on System Sciences*, pages 5504-5513, 2018.

**(Nominated for Best Paper)**

**C. Treude** and M. Aniche. Where does Google find API documentation? In *WAPI' 18: Proceedings of the 2nd International Workshop on API Usage and Evolution*, 2018. To appear.

## 2017

M. Aniche, G. Bavota, **C. Treude**, M. A. Gerosa, and A. van Deursen. Code Smells for Model-View-Controller Architectures. In *Empirical Software Engineering*, 2017. To appear.

R. Coelho, L. Almeida, G. Gousios, A. van Deursen, and **C. Treude**. Exception Handling Bug Hazards in Android: Results from a Mining Study and an Exploratory Survey. In *Empirical Software Engineering* 22, 3, pages 1264-1304, 2017.

I. S. Wiese, R. Ré, I. Steinmacher, R. T. Kuroda, G. Oliva, **C. Treude**, and M. A. Gerosa. Using contextual information to predict co-changes. In *Journal of Systems and Software* 128 (June 2017), pages 220-235, 2017.

F. N. A. Al Omran and **C. Treude**. Choosing an NLP Library for Analyzing Software Documentation: A Systematic Literature Review and a Series of Experiments. In *MSR '17: Proceedings of the 14th International Conference on Mining Software Repositories*, pages 187-197, 2017.

**(Acceptance rate 31%)**

**C. Treude** and M. P. Robillard. Understanding Stack Overflow Code Fragments. In *ICSME '17: Proceedings of the 33rd International Conference on Software Maintenance and Evolution*, pages 509-513, 2017.

**(Acceptance rate 58%)**

M. P. Robillard, A. Marcus, **C. Treude**, G. Bavota, O. Chaparro, N. Ernst, M. A. Gerosa, M. Godfrey, M. Lanza, M. Linares-Vásquez, G. Murphy, L. Moreno, D. Shepherd, and E. Wong. On-Demand Developer Documentation. In *ICSME '17: Proceedings of the 33rd International Conference on Software Maintenance and Evolution*, pages 479-483, 2017.

**(Acceptance rate 58%)**

B. A. Campbell and **C. Treude**. NLP2Code: Code Snippet Content Assist via Natural Language Tasks. In *ICSME '17: Proceedings of the 33rd International Conference on Software Maintenance and Evolution*, pages 628-632, 2017.

**(Acceptance rate 50%)**

F. Steffens, S. Marczak, F. Figueira Filho, **C. Treude**, and C. de Souza. A Preliminary Evaluation of a Gamification Framework to Jump Start Collaboration Behavior Change. In *CHASE '17: Proceedings of the 10th International Workshop on Cooperative and Human Aspects of Software Engineering*, pages 90-91, 2017.

L. Silva, F. Pinto, U. Kulesza, and C. Treude. PerfMiner Visualizer: uma ferramenta para análise da evolução do atributo de qualidade de desempenho em sistemas de software. In *SBES '17: Proceedings of the 31st Brazilian Symposium on Software Engineering*, 2017. To appear.

## 2016

**C. Treude** and M. P. Robillard. Augmenting API Documentation with Insights from Stack Overflow. In *ICSE '16: Proceedings of the 38th International Conference on Software Engineering*, pages 392-403, 2016.

**(Acceptance rate 19%)**

I. Steinmacher, T. U. Conte, **C. Treude**, and M. A. Gerosa. Overcoming Open Source Project Entry Barriers with a Portal for Newcomers. In *ICSE '16: Proceedings of the 38th International Conference on Software Engineering*, pages 273-284, 2016.

**(Acceptance rate 19%)**

C. de Souza, F. Figueira Filho, M. Miranda, R. Ferreira, **C. Treude**, and L. Singer. The Social Side of Software Platform Ecosystems. In *CHI '16: Proceedings of the 34th Annual ACM Conference on Human Factors in Computing Systems*, 2016, pages 3204-3214.

**(Acceptance rate 23%)**

M. Aniche, G. Bavota, **C. Treude**, A. van Deursen, and M. A. Gerosa. A Validated Set of Smells in Model-View-Controller Architectures. In *ICSME '16: Proceedings of the 32nd International Conference on Software Maintenance and Evolution*, pages 233-243, 2016.

**(Acceptance rate 29%)**

I. S. Wiese, I. Steinmacher, **C. Treude**, J. T. Da Silva, and M. A. Gerosa. Who is who in the mailing list? Comparing six disambiguation heuristics to identify multiple addresses of a participant. In *ICSME '16: Proceedings of the 32nd International Conference on Software Maintenance and Evolution*, pages 345-355, 2016.

**(Acceptance rate 29%)**

M. Aniche, **C. Treude**, A. Zaidman, A. van Deursen, and M. A. Gerosa. SATT: Tailoring Code Metric Thresholds for Different Software Architectures. In *SCAM '16: Proceedings of the 16th International Working Conference on Source Code Analysis and Manipulation*, pages 41-50, 2016.

**(Acceptance rate 38%)**

M. Aniche, M. A. Gerosa, and **C. Treude**. Developers' Perceptions on Object-Oriented Design and Architectural Roles. In *SBES '16: Proceedings of the 30th Brazilian Symposium on Software Engineering*, pages 63-72, 2016.

## 2015

**C. Treude**, M. P. Robillard, and B. Dagenais. Extracting Development Tasks to Navigate Software Documentation. In *IEEE Transactions on Software Engineering* 41, 6 (June 2015), pages 565-581, 2015.

**C. Treude**, F. Figueira Filho, and U. Kulesza. Summarizing and Measuring Development Activity. In *ESEC/FSE '15: Proceedings of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 625-636, 2015.

**(Acceptance rate 25%)**

F. Figueira Filho, M. G. Perin, **C. Treude**, S. Marczak, L. Melo, I. Marques da Silva, and L. Bibiano dos Santos. A study on the geographical distribution of Brazil's prestigious software developers. In *Journal of Internet Services and Applications* 6, 17 (June 2015), pages 1-12, 2015.

F. Pinto, U. Kulesza, and **C. Treude**. Automating the Performance Deviation Analysis for Multiple System Releases: an Evolutionary Study. In *SCAM '15: Proceedings of the 15th International Working Conference on Source Code Analysis and Manipulation*, pages 201-210, 2015.

**(Acceptance rate 35%)**

R. Ferreira, M. Miranda, F. Figueira Filho, C. de Souza, **C. Treude**, and L. Singer. Os Aspectos Sociais dos Ecossistemas de Software. In *SBSC '15: Proceedings of the Brazilian Symposium in Collaborative Systems*, pages 9-16, 2015.

**(Best Paper)**

F. Steffens, S. Marczak, F. Figueira Filho, **C. Treude**, L. Singer, D. Redmiles, and B. Al-Ani. Using Gamification as a Collaboration Motivator for Software Development Teams: A Preliminary Framework. In *SBSC '15: Proceedings of the Brazilian Symposium in Collaborative Systems*, pages 48-55, 2015.

J. Lima, **C. Treude**, F. Figueira Filho, and U. Kulesza. Assessing Developer Contribution with Repository Mining-based Metrics. In *ICSME '15: Proceedings of the 31st International Conference on Software Maintenance and Evolution*, pages 536-540, 2015.

**(Acceptance rate 35%)**

L. Leite, **C. Treude**, and F. Figueira Filho. UEDashboard: Awareness of Unusual Events in Commit Histories. In *ESEC/FSE '15: Proceedings of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 978-981, 2015.

**C. Treude**, C. Prolo, and F. Figueira Filho. Challenges in Analyzing Software Documentation in Portuguese. In *SBES '15: Proceedings of the 29th Brazilian Symposium on Software Engineering*, pages 179-184, 2015.

**C. Treude**, M. Sicard, M. Klocke, and M. P. Robillard. TaskNav: Task-based Navigation of Software Documentation. In *ICSE '15: Proceedings of the 37th International Conference on Software Engineering*, pages 649-652, 2015.

**(Acceptance rate 60%)**

S. Marczak, F. Figueira Filho, L. Singer, **C. Treude**, F. Steffens, D. Redmiles, and B. Al-Ani. Studying Gamification as a Collaboration Motivator for Virtual Software Teams: Social Issues, Cultural Issues, and Research Methods. In *Proceedings of the CSCW 2015 workshop on Doing CSCW Research in Latin America: Differences, Opportunities, Challenges, and Lessons Learned*, 2015.

L. Leite, **C. Treude**, and F. Figueira Filho. An Automatic Approach to Detect Unusual Events in Software Repositories. In *ELA-ES '15: Proceedings of the 2nd Latin-American School on Software Engineering*, 2015.

## 2013

L. Singer, F. Figueira Filho, B. Cleary, **C. Treude**, M.-A. Storey, and K. Schneider. Mutual Assessment in the Social Programmer Ecosystem: An Empirical Investigation of Developer Profile Aggregators. In *CSCW '13: Proceedings of the Conference on Computer Supported Cooperative Work*, pages 103-116, 2013.

**(Acceptance rate 36%; nominated for Best Paper)**



C. Parnin, **C. Treude**, and M.-A. Storey. Blogging Developer Knowledge: Motivations, Challenges and Future Directions. In *ICPC '13: Proceedings of the 21st International Conference on Program Comprehension*, pages 211-214, 2013.

**(Acceptance rate 36%; Most Promising Idea Award)**

B. Cleary, M.-A. Storey, C. Gomez, L. Singer, and **C. Treude**. Analyzing the Friendliness of Exchanges in an Online Software Developer Community. In *CHASE '13: Proceedings of 6th International Workshop on Cooperative and Human Aspects of Software Engineering*, pages 159-160, 2013.

B. Cleary, **C. Treude**, F. Figueira Filho, M.-A. Storey, and M. Salois. Improving Tool Support for Software Reverse Engineering in a Security Context. In *Foundations of Augmented Cognition, Lecture Notes in Computer Science*, D. D. Schmorow and C. M. Fidopiastis, Eds., pages 113-122, 2013.

O. Barzilay, **C. Treude**, and A. Zagalsky. Facilitating Crowd Sourced Software Engineering via Stack Overflow. In *Finding Source Code on the Web for Remix and Reuse*, S. E. Sim and R. Gallardo-Valencia, Eds., pages 289-308, 2013.

## 2012

**C. Treude** and M.-A. Storey. Work Item Tagging: Communicating Concerns in Collaborative Software Development. In *IEEE Transactions on Software Engineering* 38, 1 (January/February 2012), pages 19-34, 2012.

**(Special Section on Selected Papers from ICSE '09)**

**C. Treude**, P. Gorman, L. Grammel, and M.-A. Storey. WorkItemExplorer: Visualizing Software Development Tasks Using an Interactive Exploration Environment. In *ICSE '12: Proceedings of the 34th International Conference on Software Engineering*, pages 1399-1402, 2012.

**(Acceptance rate 31%)**

**C. Treude**, F. Figueira Filho, B. Cleary, and M.-A. Storey. Programming in a Socially Networked World: the Evolution of the Social Programmer. In *FutureCSD '12: Proceedings of the CSCW Workshop on the Future of Collaborative Software Development*, 2012.

**C. Treude**. The Role of Social Media Artifacts in Collaborative Software Development. *PhD thesis, University of Victoria*, 2012.

C. Parnin, **C. Treude**, L. Grammel, and M.-A. Storey. Crowd Documentation: Exploring the Coverage and the Dynamics of API Discussions on Stack Overflow. *Georgia Tech Technical Report GIT-CS-12-05, Georgia Institute of Technology*, 2012.

## 2011

**C. Treude** and M.-A. Storey. Effective Communication of Software Development Knowledge Through Community Portals. In *ESEC/FSE '11: Proceedings of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 91-101, 2011.

**(Acceptance rate 17%)**

**C. Treude**, F. Figueira Filho, M.-A. Storey, and M. Salois. An Exploratory Study of Software Reverse Engineering in a Security Context. In *WCRE '11: Proceedings of the 18th Working Conference on Reverse Engineering*, pages 184-188, 2011.

**(Acceptance rate 48%)**

**C. Treude**, O. Barzilay, and M.-A. Storey. How do Programmers Ask and Answer Questions on the Web? (NIER Track). In *ICSE '11: Proceedings of the 33rd ACM/IEEE International Conference on Software Engineering*, pages 804-807, 2011.

(Acceptance rate 23%)

C. Parnin and **C. Treude**. Measuring API Documentation on the Web. In *Web2SE '11: Proceedings of the 2nd International Workshop on Web 2.0 For Software Engineering*, pages 25-30, 2011.

**C. Treude**, M.-A. Storey, A. van Deursen, A. Begel, and S. Black. Second International Workshop on Web 2.0 for Software Engineering (Web2SE 2011). In *ICSE '11: Proceedings of the 33rd ACM/IEEE International Conference on Software Engineering*, pages 1222-1223, 2011.

**C. Treude**, M.-A. Storey, A. van Deursen, A. Begel, and S. Black. Workshop Report from Web2SE 2011: 2nd International Workshop on Web 2.0 for Software Engineering. In *SIGSOFT Software Engineering Notes* 36, 5 (September 2011), pages 24-29, 2011.

## 2010

**C. Treude** and M.-A. Storey. Awareness 2.0: Staying Aware of Projects, Developers and Tasks using Dashboards and Feeds. In *ICSE '10: Proceedings of the 32nd ACM/IEEE International Conference on Software Engineering – Volume 1*, pages 365-374, 2010.

(Acceptance rate 14%)

**C. Treude** and M.-A. Storey. Bridging Lightweight and Heavyweight Task Organization: The Role of Tags in Adopting New Task Categories. In *ICSE '10: Proceedings of the 32nd ACM/IEEE International Conference on Software Engineering – Volume 2*, pages 231-234, 2010.

(Acceptance rate 25%)

G. Bougie, **C. Treude**, D. M. German, and M.-A. Storey. A Comparative Exploration of FreeBSD Bug Lifetimes. In *MSR '10: Proceedings of the 2010 International Working Conference on Mining Software Repositories*, pages 106-109, 2010.

M.-A. Storey, **C. Treude**, A. van Deursen, and L.-T. Cheng. The Impact of Social Media on Software Engineering Practices and Tools. In *FoSER '10: Proceedings of the FSE/SDP workshop on Future of software engineering research*, pages 359-364, 2010.

L. Grammel, H. Schackmann, A. Schröter, **C. Treude** and M.-A. Storey. Attracting the Community's Many Eyes: an Exploration of User Involvement in Issue Tracking. In *HAoSE' 10: Human Aspects of Software Engineering*, Article 3, 2010.

**C. Treude** and M.-A. Storey. The Implications of How We Tag Software Artifacts: Exploring Different Schemata and Metadata for Tags. In *Web2SE '10: Proceedings of the 1st Workshop on Web 2.0 For Software Engineering*, pages 12-13, 2010.

L. Grammel, **C. Treude**, and M.-A. Storey. Mashups Environments in Software Engineering. In *Web2SE '10: Proceedings of the 1st Workshop on Web 2.0 For Software Engineering*, pages 24-25, 2010.

M.-A. Storey, L. Grammel, and **C. Treude**. Smart Media: Bridging Interactions and Services for the Smart Internet. In *The Smart Internet, Lecture Notes in Computer Science*, M. Chignell, J. Cordy, J. Ng, and Y. Yesha, Eds., pages 152-169, 2010.

**C. Treude**. The Role of Emergent Knowledge Structures in Collaborative Software Development. In *ICSE '10: Proceedings of the 32nd ACM/IEEE International Conference on Software Engineering – Volume 2*, pages 389-392, 2010.

**C. Treude**, M.-A. Storey, K. Ehrlich, and A. van Deursen. Web2SE: First Workshop on Web 2.0 for Software Engineering. In *ICSE '10: Proceedings of the 32nd ACM/IEEE International Conference on Software Engineering – Volume 2*, pages 457-458, 2010.

**C. Treude**, M.-A. Storey, K. Ehrlich, and A. van Deursen. Workshop report from Web2SE: First workshop on Web 2.0 for Software Engineering. In *SIGSOFT Software Engineering Notes* 35, 5 (October 2010), pages 45-50, 2010.

## 2009

**C. Treude** and M.-A. Storey. How tagging helps bridge the gap between social and technical aspects in software development. In *ICSE '09: Proceedings of the 2009 IEEE 31st International Conference on Software Engineering*, pages 12-22, 2009.

**(Acceptance rate 12%; invited to TSE Special Section on Selected Papers from ICSE '09)**

**C. Treude** and M.-A. Storey. ConcernLines: A timeline view of co-occurring concerns. In *ICSE '09: Proceedings of the 2009 IEEE 31st International Conference on Software Engineering*, pages 575-578, 2009.

**(Acceptance rate 33%)**

L. Grammel, M.-A. Storey, and **C. Treude**. User interfaces for visual analysis and monitoring in business intelligence. In *CASCON '09: Proceedings of the 2009 Conference of the Center for Advanced Studies on Collaborative Research*, pages 323-324, 2009.

**C. Treude**, M.-A. Storey, and J. Weber. Empirical Studies on Collaboration in Software Development: A Systematic Literature Review. *Technical Report DCS-331-IR, Department of Computer Science, University of Victoria*, 2009.

## 2007

**C. Treude**, S. Berlik, S. Wenzel, and U. Kelter. Difference computation of large models. In *ESEC/FSE '07: Proceedings of the 6th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 295-304, 2007.

**(Acceptance rate 17%)**

**C. Treude**. Einsatz multidimensionaler Suchstrukturen zur Optimierung der Bestimmung von Dokumentendifferenzen. *Diplom thesis, Universität Siegen*, 2007.  
(in German)

## Presentations

### Keynote Addresses

Effective Representation and Dissemination of Programming Knowledge  
November 3, 2021, 7th International Conference on Data and Software Engineering, Bandung, Indonesia

Bite-sized Software Documentation  
September 25, 2019, 7th Workshop on Software Visualization, Evolution, and Maintenance, Salvador, Brazil

How Do Social Media Artifacts Support Collaborative Software Development? Empirical Studies from the University of Victoria  
September 5, 2011, 4th International Workshop on Social Software Engineering, Szeged, Hungary

## *Invited Talks*

Engineering SE4FMAApps: Challenges and Best Practices

*September 2023, Huawei Strategy and Technology Workshop, Shenzhen, China*

Getting information to software engineers when and where they need it

*September 2023, Australian National University, Canberra, Australia*

Coding in the Real World: Teaching Programming Through Open Source Collaboration

*September 2023, Second International Workshop on BRIdging the Divides with Globally Engineered Software, Port Moresby, Papua New Guinea*

Unlocking the Human and Social Side of Software Engineering: From Programmers to Ecosystems

*February 2023, Singapore Management University, Singapore*

Effective Representation and Dissemination of Programming Knowledge

*December 2022, Nara Institute of Science and Technology, Nara, Japan*

Effective Representation and Dissemination of Programming Knowledge

*November 2022, National University of Singapore, Singapore*

Effective Representation and Dissemination of Programming Knowledge

*November 2022, SAP, Walldorf, Germany*

Getting information to software engineers when and where they need it

*August 2022, University of Otago, Dunedin, New Zealand*

Getting information to software engineers when and where they need it

*May 2022, Monash University, Melbourne, Australia*

Effective Representation and Dissemination of Programming Knowledge

*April 2021, University of Adelaide, Adelaide, Australia*

Improving software documentation quality

*April 2021, Google Tech Talk, Sydney, Australia*

Uncovering the best parts of software documentation

*January 2020, Università della Svizzera italiana, Lugano, Switzerland*

NLP-driven access to software documentation

*February 2019, Asia Pacific Track at SANER 2019, Hangzhou, China*

Unlocking software documentation

*January 2019, University of Texas at Dallas, Dallas, United States*

Supporting developers in navigating software documentation

*September 2018, Carnegie Mellon University, Pittsburgh, United States*

Bridging the gap between software documentation authors and consumers

*August 2018, ABB Research, Raleigh, United States*

Unlocking insights hidden in software documentation

*August 2018, North Carolina State University, United States*

Repacking software artefacts to bridge the gap between documentation authors and readers

*April 2018, University of Canterbury, Christchurch, New Zealand*

Supporting developers in navigating software documentation

*April 2018, Victoria University of Wellington, Wellington, New Zealand*

Enabling better access to software documentation

*April 2018, University of Auckland, Auckland, New Zealand*

Unlocking the information hidden in software repositories with NLP and ML

*February 2018, Tokyo Institute of Technology, Tokyo, Japan*

Using NLP and ML to unlock information hidden in software repositories

*February 2018, Waseda University, Tokyo, Japan*

Bridging the gap between software documentation authors and consumers

*January 2018, Kyushu University, Fukuoka, Japan*

Unlocking information hidden in software repositories

*January 2018, Osaka University, Osaka, Japan*

Enabling full access to the information in software repositories

*December 2017, Nara Institute of Science and Technology, Nara, Japan*

Bimodal Software Documentation

*October 2017, The 55th CREST Open Workshop - Bimodal Program Analysis, London, United Kingdom*

Unlocking the insights hidden in software documentation

*October 2017, Monash University, Melbourne, Australia*

Using Natural Language Processing to Enhance Software Documentation

*July 2017, Harbin Institute of Technology, Harbin, China*

Code Snippet Content Assist via Software Development Tasks

*July 2017, Harbin Institute of Technology, Harbin, China*

Supporting Newcomers to Software Projects

*July 2017, Harbin Institute of Technology, Harbin, China*

Building Tools to Improve Access to Software Documentation

*June 2017, Singapore Management University, Singapore*

“Stop trying to do what you’re trying to do”: Developers’ Perceptions of Measuring Productivity

*March 2017, Dagstuhl Seminar on Rethinking Productivity in Software Engineering, Dagstuhl, Germany*

Searching and summarizing software documentation

*February 2017, Northern Arizona University, Flagstaff, AZ, United States*

Improving access to software documentation

*January 2017, Data61, Sydney, NSW, Australia*

Finding and navigating software documentation

*June 2016, MapTek, Adelaide, SA, Australia*

Making sense of software documentation with natural language processing

*April 2016, Hong Kong University of Science and Technology, Hong Kong, China*

Using natural language processing to make sense of software documentation

*April 2016, Deakin University, Melbourne, Australia*

Using NLP to identify meaningful sentences in informal documentation

March 2016, NII Shonan Meeting on Mining & Modeling Unstructured Data in Software – Challenges for the Future, Shonan, Japan

TaskNav: A Search Interface for Software Documentation Using Natural Language Processing

December 2015, Fluminense Federal University, Niterói, RJ, Brazil

Searching Software Documentation with the Help of Natural Language Processing

November 2015, Bluesoft, São Paulo, SP, Brazil

Source code and everything else: Enabling full access to software repositories

October 2015, University of Adelaide, SA, Australia

Using Natural Language Processing to Extract Task Descriptions from Software Documentation

September 2015, Concordia University, Montreal, QC, Canada

Supporting Software Developers by Automatically Extracting Development Task Descriptions

February 2015, Universidade de São Paulo, SP, Brazil

The Role of Social Media Artifacts in Collaborative Software Development

April 2012, University of Massachusetts Amherst, MA, United States

The Role of Social Media Artifacts in Collaborative Software Development

February 2012, The College of William and Mary, Williamsburg, VA, United States

The Role of Social Media Artifacts in Collaborative Software Development

February 2012, Rochester Institute of Technology, Rochester, NY, United States

Awareness 2.0: Staying Aware of Projects, Developers and Tasks using Dashboards and Feeds

September 2010, IBM Research, Hawthorne, NY, United States

Lightweight Collaboration: Tags, Dashboards and Feeds in IBM's Jazz

March 2010, University of California, Irvine, CA, United States

Dashboards in IBM's Jazz: Business Intelligence for Software Development

November 2009, IBM CASCON Workshop on User Interfaces for Visual Analysis and Monitoring in Business Intelligence, Toronto, ON, Canada

Lightweight Collaboration: Tags, Dashboards & Feeds in Jazz

August 2009, McGill University, Montreal, QC, Canada

How Tagging Supports Informal Processes in Software Development

August 2009, Department of National Defense, Valcartier, QC, Canada

Tags for Work Items and Dashboards in IBM's Jazz

July 2009, IBM Cognos, Ottawa, ON, Canada

How Tagging Supports Informal Processes in Software Development

June 2009, IBM Research, Hawthorne, NY, United States

How Tagging Supports Informal Processes in Software Development

June 2009, IBM Research, Cambridge, MA, United States

## Teaching

**SWEN 90016:** Software Processes and Management (*Masters course*)  
July 2023 – October 2023, University of Melbourne, Australia

**SWEN 90014:** Masters Software Engineering Project (*Masters course*)  
July 2023 – October 2023, University of Melbourne, Australia

**SWEN 90016:** Software Processes and Management (*Masters course*)  
February 2023 – June 2023, University of Melbourne, Australia

**SWEN 90016:** Software Processes and Management (*Masters course*)  
July 2022 – October 2022, University of Melbourne, Australia

**COMP 90082:** Software Project (*Masters course*)  
July 2022 – October 2022, University of Melbourne, Australia

**SWEN 90016:** Software Processes and Management (*Masters course*)  
February 2022 – June 2022, University of Melbourne, Australia

**COMP SCI 4405 / 7405:** Research Methods in Software Engineering and Computer Science (*Honours and Masters course*)  
February 2021 – June 2021, University of Adelaide, Australia

**COMP SCI 4023 / 4123 / 7023:** Software Process Improvement (*Undergraduate, Honours, and Masters course*)  
February 2021 – June 2021, University of Adelaide, Australia

**COMP SCI 7036:** Software Engineering in Industry (*Masters course*)  
February 2021 – June 2021, University of Adelaide, Australia

**COMP SCI 4405 / 7405:** Research Methods in Software Engineering and Computer Science (*Honours and Masters course*)  
February 2020 – June 2020, University of Adelaide, Australia

**COMP SCI 7036:** Software Engineering in Industry (*Masters course*)  
February 2020 – June 2020, University of Adelaide, Australia

**Open Source Software Development** (*Undergraduate course*)  
July 2019, Harbin Institute of Technology, Harbin, China

**COMP SCI 4405 / 7405:** Research Methods in Software Engineering and Computer Science (*Honours and Masters course*)  
February 2019 – June 2019, University of Adelaide, Australia

**COMP SCI 4404:** Software Engineering Research Project (*Honours course*)  
July 2018 – October 2018, University of Adelaide, Australia

**Open Source Software Development** (*Undergraduate course*)  
July 2018, Harbin Institute of Technology, Harbin, China

**COMP SCI 3006NA / 7015NA:** Software Engineering & Project (*Undergraduate and graduate course*)  
October 2017 – December 2017, Ngee Ann-Adelaide Education Centre, Singapore

**COMP SCI 4404:** Software Engineering Research Project (*Honours course*)  
July 2017 – October 2017, University of Adelaide, Australia

**COMP SCI 7096B:** Master of Software Engineering Project Part B (*Masters course*)  
 July 2017 – October 2017, University of Adelaide, Australia

**COMP SCI 4809 / 7409:** Search Based Software Engineering (*Honours and Masters course*)  
 July 2017 – October 2017, University of Adelaide, Australia

**COMP SCI 3006NA / 7015NA:** Software Engineering & Project (*Undergraduate and graduate course*)  
 April 2017 – June 2017, Ngee Ann-Adelaide Education Centre, Singapore

**COMP SCI 2205:** Software Engineering Workshop I (*Undergraduate course*)  
 February 2017 – June 2017, University of Adelaide, Australia

**COMP SCI 4405 / 7405:** Research Methods in Software Engineering and Computer Science (*Honours and Masters course*)  
 February 2017 – June 2017, University of Adelaide, Australia

**COMP SCI 7096A:** Master of Software Engineering Project Part A (*Masters course*)  
 February 2017 – June 2017, University of Adelaide, Australia

**COMP SCI 4404:** Software Engineering Research Project (*Honours course*)  
 July 2016 – October 2016, University of Adelaide, Australia

**COMP SCI 2201 / 7201 SGDE:** Small Group Discovery Experience for Algorithm & Data Structure Analysis (*Undergraduate course*)  
 July 2016 – October 2016, University of Adelaide, Australia

**COMP SCI 7096B:** Master of Software Engineering Project Part B (*Masters course*)  
 July 2016 – October 2016, University of Adelaide, Australia

**COMP SCI 4405 / 7405:** Research Methods in Software Engineering and Computer Science (*Honours and Masters course*)  
 February 2016 – June 2016, University of Adelaide, Australia

**COMP SCI 7036:** Software Engineering in Industry (*Masters course*)  
 February 2016 – June 2016, University of Adelaide, Australia

**Mining Software Repositories** (*Undergraduate and graduate course*)  
 February 2015 – June 2015, Universidade Federal do Rio Grande do Norte, Brazil

**Programmierpraktikum** (*programming course in Java, taught in German*)  
 April 2007 – July 2007, Universität Siegen, Germany

## Graduated PhD Students

**Hugo Faria Melo**, Identifying and Analyzing Java Exception Handling Guidelines: A Developers Point-of-View, co-supervised with Roberta Coelho, graduated November 2019, Federal University of Rio Grande do Norte, Brazil

**Mahfouth Ahmad Alghamdi**, Summarising Software Engineering Data, co-supervised with Markus Wagner, graduated February 2022, University of Adelaide, Australia

**Rodrigo Rebouças de Almeida**, Business-driven Technical Debt Prioritization, co-supervised with Uirá Kulesza, graduated February 2022, Federal University of Rio Grande do Norte, Brazil

**Bakheet Hamdan M Aljedaani**, A Knowledge-based Approach to the Development of Secure Software for IoT-based Healthcare, co-supervised with M. Ali Babar, graduated March 2022, University of Adelaide, Australia



**Brittany Anne Reid**, Improving Developer Efficiency through Code Reuse, *co-supervised with Markus Wagner, graduated November 2023, University of Adelaide, Australia*

### *Graduated MPhil Students*

**Supun Dissanayake**, Fuzz Target Generation, *co-supervised with Markus Wagner and Yuval Yarom, graduated July 2022, University of Adelaide, Australia*

**Wen Siang Tan**, Automatic Detection and Analysis of Outdated Architecture Documentation in GitHub Wikis, *co-supervised with Markus Wagner, graduated July 2023, University of Adelaide, Australia*

### *Current PhD/MPhil Students*

**Hamzah Arishi**, A Framework for Enhancing the Student Experience Through Automated Analysis, *co-supervised with Nickolas Falkner and Thushari Atapattu, started November 2020, University of Adelaide, Australia*

**James Caddy**, Surprising Artefacts in Codebases, *co-supervised with Markus Wagner, started September 2021, University of Adelaide, Australia*

**Oscar Manglaras**, Visualising Micro-Service Architectures, *co-supervised with Markus Wagner, started January 2022, University of Adelaide, Australia*

**Vinay Kabadi**, Automated Software Debugging and Repair: Empirical Study and Techniques for Repair, *co-supervised with Bach Le and Patanamon Thongtanunam, started February 2022, University of Melbourne, Australia*

**Adriano Rodrigues Figueiredo Torres**, Applications of Information Theory to Software Repositories, *co-supervised with Markus Wagner and Sebastian Baltes, started March 2022, University of Adelaide, Australia*

**Larissa Salerno de Castro**, Software Installation in Third-Party Software Ecosystems, *co-supervised with Patanamon Thongtanunam, started April 2022, University of Melbourne, Australia*

**Wachiraphan Charoenwet**, Pragmatic use of CodeQL in the Context of Code Review, *co-supervised with Patanamon Thongtanunam and Thuan Pham, started May 2022, University of Melbourne, Australia*

**Haoyu Gao**, Technical Document Simplification, *co-supervised with Mansoorreh Zahedi, started January 2023, University of Melbourne, Australia*

**Huy Nguyen**, Encoding additional natural language artefacts for better code representation, *co-supervised with Patanamon Thongtanunam, started February 2023, University of Melbourne, Australia*

**Hong Yi Lin**, Using Neural Machine Translation Approaches to Automate Code Improvements for Code Reviews, *co-supervised with Patanamon Thongtanunam, started July 2023, University of Melbourne, Australia*

## Reviewing and Workshops

### *Workshop Organization*

**KG4SE 2020**: International Workshop on Knowledge Graph for Software Engineering at the International Conference on Software Engineering (ICSE) 2020  
*with Xin Peng, Andrian Marcus, Xin Xia, and Zhenchang Xing*

**BRIDGES 2019:** International Workshop on Bridging Divides with Globally Engineered Software in Port Moresby, Papua New Guinea  
*with Raula Kula and Hideaki Hata*

**DySDoc 2019:** Second International Workshop on Dynamic Software Documentation at McGill University's Bellairs Research Institute  
*with Martin Robillard, Andrian Marcus, and Michele Lanza*

**Adelaide Autumn School on Software Engineering 2018**  
*with Markus Wagner*

**DySDoc 2018:** Second International Workshop on Dynamic Software Documentation at McGill University's Bellairs Research Institute  
*with Martin Robillard and Andrian Marcus*

**DySDoc 2017:** First International Workshop on Dynamic Software Documentation at McGill University's Bellairs Research Institute  
*with Martin Robillard and Andrian Marcus*

**SSE 2016:** 8th International Workshop on Social Software Engineering at the Symposium on the Foundations of Software Engineering (FSE) 2016  
*with Fabio Calefato and Andrew Begel*

**QualiDASE 2015:** Bellairs 2015 Workshop on Qualitative Data Analysis in Software Engineering at McGill University's Bellairs Research Institute  
*with Martin Robillard*

**ProK 2014:** Bellairs 2014 Workshop on Representing Programming Knowledge at McGill University's Bellairs Research Institute  
*with Martin Robillard*

**Web2SE 2011:** 2nd International Workshop on Web 2.0 for Software Engineering at the International Conference on Software Engineering (ICSE) 2011  
*with Margaret-Anne Storey, Arie van Deursen, Andrew Begel, and Sue Black*

**Web2SE 2010:** First Workshop on Web 2.0 for Software Engineering at the International Conference on Software Engineering (ICSE) 2010  
*with Margaret-Anne Storey, Arie van Deursen, and Kate Ehrlich*

**User Interfaces for Visual Analysis and Monitoring in Business Intelligence** at IBM CASCON 2009  
*with Lars Grammel and Margaret-Anne Storey*

### *Program Committee Memberships*

**ICSE 2025:** 47th International Conference on Software Engineering

**FSE 2024:** 32nd Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering

**ICSE 2024:** 46th International Conference on Software Engineering (Area Chair for Human and Social Aspects)

**ICSE SEET 2024:** Software Engineering Education and Training @ ICSE 2024

**ICSE 2023:** 45th International Conference on Software Engineering

**ESEC/FSE 2022:** 30th Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering

**ICSE 2022:** 44th International Conference on Software Engineering

**MSR RR 2021:** Registered Reports Track @ MSR 2021

**ICSME NIER 2021:** New Ideas and Emerging Results @ ICSME 2021

**ICSE 2020:** 42nd International Conference on Software Engineering

**ESEC/FSE 2020:** 28th Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering

**ASE 2020:** 35th International Conference on Automated Software Engineering

**MSR 2020:** 17th International Conference on Mining Software Repositories

**MSR RR 2020:** Registered Reports Track @ MSR 2020

**ICGSE 2020:** 15th International Conference on Global Software Engineering

**SANER LBI 2020:** Late Breaking Ideas track of the 27th International Conference on Software Analysis, Evolution and Reengineering

**ICSE 2019:** 41st International Conference on Software Engineering

**ESEC/FSE 2019:** 27th Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering

**ICSME 2019:** 35th International Conference on Software Maintenance and Evolution

**MSR 2019:** 16th International Conference on Mining Software Repositories

**ASE 2019 Demo:** Demo track of the International Conference on Automated Software Engineering

**SCAM RENE 2019:** Replication and Negative Results track of the 19th International Working Conference on Source Code Analysis and Manipulation

**ESEM Industry 2019:** Industry track of the International Symposium on Empirical Software Engineering and Measurement

**SBES 2019:** 33rd Brazilian Symposium on Software Engineering

**IWESEP 2019:** 10th International Workshop on Empirical Software Engineering in Practice

**FSE 2018:** ACM SIGSOFT Symposium on the Foundations of Software Engineering

**SANER 2018:** 25th International Conference on Software Analysis, Evolution and Reengineering

**MSR 2018:** 15th International Conference on Mining Software Repositories

**SBES 2018:** 32nd Brazilian Symposium on Software Engineering

**CSCW 2018:** 21st Conference on Computer-Supported Cooperative Work and Social Computing (External Reviewer)

**SCORE 2018:** Student Contest on Software Engineering @ ICSE 2018

**ICSE 2018 SRC:** Student Research Competition of the 40th International Conference on Software Engineering

**WAPI 2018:** 2nd International Workshop on API Usage and Evolution @ ICSE 2018

**SAGRA 2018:** 4th Workshop on Sustainable Architecture: Global Collaboration, Requirements, Analysis @ ECSA 2018

**ICSE 2017:** 39th International Conference on Software Engineering

**ICSME 2017:** 33rd International Conference on Software Maintenance and Evolution

**SANER 2017:** 24th International Conference on Software Analysis, Evolution, and Reengineering

**ICGSE 2017:** 12th International Conference on Global Software Engineering

**SCAM 2017:** 17th International Working Conference on Source Code Analysis and Manipulation

**SBES 2017:** 31st Brazilian Symposium on Software Engineering

**ICSE 2017 SRC:** Student Research Competition of the 39th International Conference on Software Engineering

**ICSME NIER 2017:** New Ideas track of the 33rd International Conference on Software Maintenance and Evolution

**ISEC 2017:** 10th India Software Engineering Conference

**EAST 2017:** 4th International Workshop on Evidential Assessment of Software Technologies

**CHI 2017:** International Conference of Human-Computer Interaction (External Reviewer, recognized as Excellent Reviewer)

**CSCW 2017:** 20th Conference on Computer-Supported Cooperative Work and Social Computing (External Reviewer)

**SCAM 2016:** 16th International Working Conference on Source Code Analysis and Manipulation

**MSR 2016:** 13th Working Conference on Mining Software Repositories

**SBCARS 2016:** 10th Brazilian Symposium on Software Components, Architectures, and Reuse

**ICGSE 2016:** 11th International Conference on Global Software Engineering

**ICSME ERA 2016:** Early Research Achievements track of the 32nd International Conference on Software Maintenance and Evolution

**FSE 2016 Artifacts Track:** Artifacts track of the 24th International Symposium on the Foundations of Software Engineering

**ICSME 2016 Artifacts Track:** Artifacts track of the 32nd International Conference on Software Maintenance and Evolution

**SANER ERA 2016:** Early Research Achievements track of the 23rd International Conference on Software Analysis, Evolution, and Reengineering

**CSI-SE 2016:** 3rd International Workshop on CrowdSourcing in Software Engineering @ ICSE 2016

**CHASE 2016:** 9th International Workshop on Cooperative and Human Aspects of Software Engineering @ ICSE 2016

**WASHES 2016:** 1st Workshop on Social, Human, and Economic Aspects of Software @ SBQS 2016

**SSE 2015:** 7th International Workshop on Social Software Engineering @ FSE 2015

**OISE 2015:** First Workshop of Open Innovation in Software Engineering

**STIL 2015:** Symposium in Information and Human Language Technology

**ICSME ERA 2015:** Early Research Achievements track of the 31st International Conference on Software Maintenance and Evolution

**SBCARS 2015:** 9th Brazilian Symposium on Software Components, Architectures and Reuse @ CBSOFT 2015

**CHI 2015:** International Conference of Human-Computer Interaction (External Reviewer)

**CSI-SE 2015:** 2nd International Workshop on CrowdSourcing in Software Engineering @ ICSE 2015

**CHASE 2015:** Cooperative and Human Aspects of Software Engineering @ ICSE 2015

**MSR Mining Challenge 2015:** Mining Challenge of the 12th Working Conference on Mining Software Repositories

**MSR 2015:** 12th Working Conference on Mining Software Repositories

**SANER ERA 2015:** Early Research Achievements track of the 22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering

**ICSME 2015:** 31st International Conference on Software Maintenance and Evolution

**SSE 2014:** 6th International Workshop on Social Software Engineering @ FSE 2014

**ICSME ERA 2014:** Early Research Achievements track of the 30th International Conference on Software Maintenance and Evolution

**CSI-SE 2014:** Crowdsourcing in Software Engineering @ ICSE 2014

**CHASE 2014:** Cooperative and Human Aspects of Software Engineering @ ICSE 2014

**MSR 2014:** 11th Working Conference on Mining Software Repositories

**MSR Mining Challenge 2014:** Mining Challenge of the 11th Working Conference on Mining Software Repositories

**CSMR-WCRE Demo 2014:** Tool Demonstrations track of the CSMR-WCRE 2014 Software Evolution Week

**CSMR-WCRE ERA 2014:** Early Research Achievements track of the CSMR-WCRE 2014 Software Evolution Week

**ICSE Posters 2014:** Poster track @ ICSE 2014

**SSE 2013:** 5th International Workshop on Social Software Engineering @ ESEC/FSE 2013

**ICPC ERA 2013:** Early Research Achievements track of the 21st International Conference on Program Comprehension

**ICSE SCORE 2013:** Student Contest on Software Engineering @ ICSE 2013

**ICPC Demo 2013:** Tool demo track of the 21st International Conference on Program Comprehension

**CHASE 2013:** Cooperative and Human Aspects of Software Engineering @ ICSE 2013

**MSR Mining Challenge 2013:** Mining Challenge of the 10th Working Conference on Mining Software Repositories

**CSMR ERA 2013:** Early Research Achievements track of the 17th European Conference on Software Maintenance and Reengineering

**ICPC 2012:** 20th International Conference on Program Comprehension

**ICPC Demo 2012:** Tool demo track of the 20th International Conference on Program Comprehension

**FutureCSD 2012:** The Future of Collaborative Software Development @ CSCW 2012

**FSE NIER 2012:** New Ideas track of the International Symposium on the Foundations of Software Engineering

**FlexiTools 2011:** Flexible Modeling Tools @ ICSE 2011

**PLATEAU 2010:** Evaluation and Usability of Programming Languages and Tools @ SPLASH 2010

**CHASE 2010:** Cooperative and Human Aspects of Software Engineering @ ICSE 2010

### *Journal Reviews*

**TSE:** IEEE Transactions on Software Engineering

**TOSEM:** Transactions on Software Engineering and Methodology

**EMSE:** Empirical Software Engineering journal (Distinguished Reviewer Award in 2017)

**IEEE Software**

**JSS:** Journal of Systems and Software

**TBIT:** Behaviour & Information Technology

**JSME:** Journal of Software: Evolution and Process

**PeerJ**

**JBCS:** Journal of the Brazilian Computer Society

**TOIT:** ACM Transactions on Internet Technology

**PLOS One**

**JISA:** Journal of Internet Services and Applications

**T-IFS:** IEEE Transactions on Information Forensics and Security

### *Grant Reviews*

**ARC:** Australian Research Council

**NSERC:** Natural Sciences and Engineering Research Council of Canada

**NWO:** Netherlands Organisation for Scientific Research

**RGC:** Research Grants Council of Hong Kong

**DFG:** German Research Foundation

**SNSF:** Swiss National Science Foundation

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