

Ten Years of Software Engineering in Society

Anonymous Authors

APPENDIX

TABLE I: Primary Studies

ID	Title	Authors	Year
P01	Sustainability Design and Software: The Karlskrona Manifesto	Christoph Becker, Ruzanna Chitchyan, Leticia Duboc, Steve Easterbrook, Birgit Penzenstadler, Norbert Seyff, Colin C. Venters	2015
P02	Interdisciplinary Design Patterns for Socially Aware Computing	Harun Baraki, Kurt Geihs, Christian Voigtman, Axel Hoffmann, Romy Kniewel, Bjorn-Elmar Macek and Julia Zirfas	2015
P03	The role of design thinking and physical prototyping in social software engineering	Peter Newman, Maria Angela Ferrario, Will Simm, Stephen Forshaw, Adrian Friday, Jon Whittle	2015
P04	On the role of value sensitive concerns in software engineering practice	Balbir Barn, Ravinder Barn, Franco Raimondi	2015
P05	Engineering sustainability through language	Ruzanna Chitchyan, Walter Cazzola, Awais Rashid	2015
P06	Enabling the definition and enforcement of governance rules in open source systems	Javier Luis Cánovas Izquierdo, Jordi Cabot	2015
P07	AppCivist: a service-oriented software platform for socially sustainable activism	Animesh Pathak, Valerie Issarny, James Holston	2015
P08	SOA4DM: applying an SOA paradigm to coordination in humanitarian disaster response	Kelly Lyons, Christie Oh	2015
P09	Managing emergent ethical concerns for software engineering in society	Awais Rashid, Karenza Moore, Corinne May-Chahal, Ruzanna Chitchyan	2015
P10	Dementia and social sustainability: challenges for software engineering	Alistair Sutcliffe, Paul Rayson, Chris Bull, Pete Sawyer	2015
P11	Cognitively sustainable ICT with ubiquitous mobile services: challenges and opportunities	Marcus Jägemar, Gordana Dodig Crnkovic	2015
P12	Software energy profiling: comparing releases of a software product	Erik A. Jagroep, Jan Martijn van der Werf, Giuseppe Procacianti, Patricia Lago, Sjaak Brinkkemper, Leen Blom, Rob van Vliet	2016
P13	Sustainability design in requirements engineering: state of practice	Ruzanna Chitchyan, Walter Cazzola, Awais Rashid	2016
P14	Sustainability debt: a portfolio-based approach for evaluating sustainability requirements in architectures	Javier Garbajosa, José Ángel Sanz, Mikael Svahnberg, Jan Bosch	2016
P15	Values-first SE: research principles in practice	Maria Paasivaara, Casper Lassenius, Steven Fraser, Jürgen Münch, Kari Systä	2016
P16	A guided tour of the legal implications of software cloning	Paolo Ciancarini, Daniel Russo, Alberto Sillitti, Giancarlo Succi	2016

P17	Engineering software assemblies for participatory democracy: the participatory budgeting use case	James Holston, Valérie Issarny, Cristhian Parra	2016
P18	Software engineering and policy	Anthony Finkelstein	2016
P19	Characterising Sustainability Requirements: A New Species Red Herring or Just an Odd Fish?	Colin C. Venters, Norbert Seyff, Christoph Becker, Stefanie Betz, Ruzanna Chitchyan, Leticia Duboc, Dan McIntyre, Birgit Penzenstadler	2017
P20	Privacy Requirements: Present & Future	Pauline Anthonysamy, Awais Rashid, Ruzanna Chitchyan	2017
P21	Preparing Research Projects for Sustainable Software Engineering in Society	Dominik Renzel, Istvan Koren, Ralf Klamma, Matthias Jarke	2017
P22	Understanding How Software Can Support the Needs of Family Caregivers for Patients with Severe Conditions	Angela di Fiore, Francesco Ceschel, Francesca Fiore, Marcos Baez, Fabio Casati, Giampaolo Armellin	2017
P23	Portinari: A Data Exploration Tool to Personalize Cervical Cancer Screening	Sagar Sen, Manoel Horta Ribeiro, Raquel C. de Melo Minardi, Wagner Meira Jr., Mari Nygård	2017
P24	Deploying Large Scale School Census Hub: An Experience Report	Andrew Kinai, Juliet Mutahi, Karumba Samuel, Komminist Weldemariam	2017
P25	Crowdsourced Exploration of Mobile App Features: A Case Study of the Fort McMurray Wildfire	Maleknaz Nayebe, Rachel Quapp, Guenther Ruhe, Mahshid Marbouti, Frank Maurer	2017
P26	Leveraging the Service Bus Paradigm for Computer-Mediated Social Communication Interoperability	Rafael Angarita, Nikolaos Georgantas, Cristhian Parra, James Holston, Valérie Issarny	2017
P27	Awakening Awareness on Energy Consumption in Software Engineering	Erik Jagroep, Jordy Broekman, Jan Martijn E.M. van der Werf, Sjaak Brinkkemper, Patricia Lago, Leen Blom, Rob van Vliet	2017
P28	Software Heritage: Why and How We Collect, Preserve and Share All the Software Source Code	Roberto Di Cosmo	2018
P29	The Role of Foundations in Open Source Projects	Javier Luis Cánovas Izquierdo, Jordi Cabot	2018
P30	User Feedback in the App Store: A Cross-Cultural Study	Emitza Guzman, Luís Oliveira, Yves Steiner, Laura C. Wagner, Martin Glinz	2018
P31	Assistive Computing: A Human-Centered Approach to Developing Computing Support for Cognition	Simon Harper, Sean Bechhofer, Carsten Maple, Colin P. Perera, Dave Green, Andy Brown	2018
P32	Agile Development for Vulnerable Populations: Lessons Learned and Recommendations	Marcos Baez, Fabio Casati	2018
P33	Digitalization of Swedish Government Agencies - A Perspective Through the Lens of a Software Development Census	Markus Borg, omas Olsson, Ulrik Franke, Said Assar	2018
P34	Contracting Agile Developments for Mission Critical Systems in the Public Sector	Daniel Russo, Gerolamo Taccogna, Paolo Ciancarini, Angelo Messina, Giancarlo Succi	2018
P35	Resolving Ambiguities in Regulations: Towards Achieving the Kohlbergian Stage of Principled Morality	Smita Ghaisas, Abhishek Sainani, Preethu Rose	2018
P36	SE in ES: Opportunities for Software Engineering and Cloud Computing in Environmental Science	W.A. Simm, F. Samreen, R. Bassett, M.A. Ferrario, G. Blair, J. Whittle, P.J. Young	2018
P37	Towards a Unified Conceptual Model for Surveillance Theories: "We Shall Meet in the Place Where There is no Darkness" - 1984, George Orwell	Balbir S. Barn, Ravinder Barn	2018
P38	Competence-Confidence Gap: A Threat to Female Developers' Contribution on GitHub	Zhendong Wang, Yi Wang, David Redmiles	2018

P39	Digital Ecclesia: Towards an Online Direct-Democracy Framework	Dionysis Athanasopoulos	2018
P40	Gender Diversity and Women in Software Teams: How Do They Affect Community Smells?	Gemma Catolino, Fabio Palomba, Damian A. Tamburri, Alexander Serebrenik, Filomena Ferrucci	2019
P41	Trust Beyond Computation Alone: Human Aspects of Trust in Blockchain Technologies	Barnaby Craggs, Awais Rashid	2019
P42	An Anatomy of Security Conversations in Stack Overflow	Tamara Lopez, Thein Tun, Arosha Bandara, Mark Levine, Bashar Nuseibeh, Helen Sharp	2019
P43	Software Engineering in Civic Tech A Case Study about Code for Ireland	Antti Knutas, Victoria Palacin, Giovanni Maccani, Markus Helfert	2019
P44	Beyond the Code Itself: How Programmers Really Look at Pull Requests	Denae Ford, Mahnaz Behroozi, Alexander Serebrenik, Chris Parnin	2019
P45	Architecture Design Decision Maps for Software Sustainability	Patricia Lago, Ivano Malavolta, Paris Avgeriou, Henry Muccini, Alexander Serebrenik, Damian Andrew Tamburri, Gianluca Reggio	2019
P46	Building Trust in the Untrustable	Emilia Cioroica, Barbora Buhnova, Thomas Kuhn, Daniel Schneider	2020
P47	Debugging Hiring: What Went Right and What Went Wrong in the Technical Interview Process	Mahnaz (Mana) Behroozi, Shivani Shirolkar, Titus Barik, Chris Parnin	2020
P48	Deep Learning for Smart Sewer Systems: Assessing Nonfunctional Requirements	Hemanth Gudaparthi, Reese Johnson, Harshitha Challa, Nan Niu	2020
P49	Designing Edutainment Software for Digital Skills Nurturing of Preschoolers. A Method Proposal.	Adriana-Mihaela Guran, Grigoreta Sofia Cojocar, Anamaria Moldovan	2020
P50	Developing Software for Motivating Individuals with Intellectual Disabilities to do Outdoor Physical Activity	Juan C Torrado, Ida Wold, Letizia Jaccheri, Susanna Pelagatti, Stefano Chessa, Javier Gomez, Gunnar Hartvigsen, Henriette Michalsen	2020
P51	From Abstract Specifications to Application Generation	José Miguel Pérez-Álvarez, Adrian Mos	2020
P52	From RE Cares to SE Cares: Software Engineering for Social Good, One Venue at a Time	Alex Dekhtyar, Jane Hayes, Jennifer Horkoff, Gunter Mussbacher, Irit Hadar, Meira Levy, Tingting Yu, Jared Payne, Barbara Paech, Kim Youngjoon, Jo Eunjung, Heo Seungbum, Kim Youngjoon, Kim Youngjoon, Kim Youngjoon	2020
P53	How layered reuse can support harmful micropolitics: SAP ERP in surgery planning	Dzifa Ametowobla, Lutz Prechelt	2020
P54	Human Behaviour Centered Design: Developing a Software System for Cultural Heritage	Julie Dugdale, Mahyar Tourchi Moghaddam, Henry Muccini	2020
P55	Is Using Deep Learning Frameworks Free? Characterizing Technical Debt in Deep Learning Frameworks	Jiakun Liu, Qiao Huang, Xin Xia, Emad Shihab, David Lo, Shanping Li	2020
P56	Refactoring Community Smells in the Wild: The Practitioner's Field Manual	Gemma Catolino, Fabio Palomba, Damian Andrew Tamburri, Alexander Serebrenik, Filomena Ferrucci	2020
P57	Society-Oriented Applications Development: Investigating Users' Values from Bangladeshi Agriculture Mobile Applications	Rifat Ara Shams, Waqar Hussain, Gillian Oliver, Harsha Perera, Arif Nurwidyantoro, Jon Whittle	2020
P58	Exploring the Role of Creativity in Software Engineering	Wouter Groeneveld, Laurens Luyten, Joost Vennekens, Kris Aerts	2021

P59	Awareness and Perception of Agile in Saudi Software Industry	Fahad S Altuwaijri, Maria Angela Ferrario	2021
P60	Résumé-Driven Development: A Definition and Empirical Characterization	Sourav Bhattacharya, Pallavi Sharma, Sachin Kumar	2021
P61	A First Look at Human Values-Violation in App Reviews	Humphrey O. Obie, Waqar Hussain, Xin Xia, John Grundy, Li Li, Burak Turhan, Jon Whittle, Mojtaba Shahin	2021
P62	Investigating the Potential Impact of Values on Requirements and Software Engineering	Soo Ling Lim, M. Ali Babar, Ross Jeffery, Bjorn Decreus	2021
P63	COVID-19 vs Social Media Apps: Does Privacy Really Matter?	J. A. Goguen, S. Marsh, J. Waterson, M. A. Ferrario, W. Simm, W. Hussain, T. Nabity-Grover, C. M. Cheung, J. B. Thatcher, N. Ahmed, R. A. Michelin, W. Xue, S. Ruj	2021
P64	QFL: Data-Driven Feedback Loop to Manage Quality in Agile Development	Lidia López, Antonin Ahbervé, Alessandra Bagnato, Xavier Franch	2021
P65	Does Culture Matter? Impact of Individualism and Uncertainty Avoidance on App Reviews	Fischer, Ricarda Anna-Lena and Walczuch, Rita and Guzman, Emitza	2021
P66	Understanding Community Smells Variability: A Statistical Approach	Catolino, Gemma and Palomba, Fabio and Tamburri, Damian A. and Serebrenik, Alexander	2021
P67	Understanding Emotions of Developer Community Towards Software Documentation	Akhila Sri Manasa Venigalla, Sridhar Chimalakonda	2021
P68	Image-Based Social Sensing: Combining AI and the Crowd to Mine Policy-Adherence Indicators from Twitter	Omar Haggag, Sherif Haggag, John Grundy, Mohamed Abdelrazek	2021
P69	A New Approach Towards Ensuring Gender Inclusive SE Job Advertisements	Bianca Trinkenreich, Ricardo Britto, Marco A. Gerosa, Igor Steinmacher	2022
P70	A Review of How Whistleblowing is Studied in Software Engineering, and the Implications for Research and Practice	Lucy Hunt, Maria Angela Ferrario	2022
P71	An empirical investigation on the challenges faced by women in the software industry: A case study	Alice Allen, Alexander A. Gorshenev, Timur M. Mukhametzyanov, Sarah Sharp, Alexander Serebrenik	2022
P72	Attracting and retaining oss contributors with a maintainer dashboard	Mariam Guizani, Thomas Zimmermann, Anita Sarma, Denae Ford	2022
P73	Detecting interpersonal conflict in issues and code review: cross pollinating open-and closed-source approaches	Yijun Yu, Arosha Bandara, Bashar Nuseibeh	2022
P74	DRESS-ML: A domain-specific language for modelling exceptional scenarios and self-adaptive behaviours for drone-based applications	Lucas Alves, José Davi Pereira, Natália Aragão, Matheus Chagas, Paulo Henrique Maia	2022
P75	Good fences make good neighbours? on the impact of cultural and geographical dispersion on community smells	Stefano Lambiase, Gemma Catolino, Damian A. Tamburri, Alexander Serebrenik, Fabio Palomba, Filomena Ferrucci	2022
P76	How are diverse end-user human-centric issues discussed on GitHub?	H. K. Dam, B. T. R. Savarimuthu, D. Avery, A. Ghose	2022
P77	How to debug inclusivity bugs? a debugging process with information architecture	Mariam Guizani, Igor Steinmacher, Jillian Emard, Abrar Fallatah, Margaret Burnett, Anita Sarma	2022
P78	Impact of animated objects on autistic and non-autistic users	Marco A. Gerosa, Bianca Trinkenreich, Igor Steinmacher	2022

P79	Lowering barriers to application development with cloud-native domain-specific functions	José Miguel Pérez-Álvarez, Adrian Mos, Benjamin V. Hanrahan, Iyadunni J. Adenuga	2022
P80	Open Data Inclusion through Narrative Approaches	Josephine Harringer, Eva-Lotta Sallnäs Pysander, Thomas Hellström	2022
P81	Perceptions of the State of D&I and D&I Initiative in the ASF	Mariam Guizani, Bianca Trinkenreich, Aileen Abril Castro-Guzman, Igor Steinmacher, Marco Gerosa, Anita Sarma	2022
P82	Scratch as social network: topic modeling and sentiment analysis in scratch projects	Isabella Graßl, Gordon Fraser	2022
P83	Software engineers' response to public crisis: lessons learnt from spontaneously building an informative COVID-19 dashboard	Han Wang, Chao Wu, Chunyang Chen, Burak Turhan, Shipping Chen, Jon Whittle	2022
P84	Why do projects join the Apache Software Foundation?	Marco A. Gerosa, Bianca Trinkenreich, Igor Steinmacher	2022
P85	Worldwide gender differences in public code contributions: and how they have been affected by the covid-19 pandemic	Davide Rossi, Stefano Zacchiroli	2022
P86	Designing for Cognitive Diversity: Improving the GitHub Experience for Newcomers	Italo Santos, Joao Felipe Pimentel, Igor Wiese, Igor Steinmacher, Anita Sarma, Marco Aurelio Gerosa	2023
P87	Security Thinking in Online Freelance Software Development	Irum Rauf, Marian Petre, Thein Tun, Tamara Lopez, Bashar Nuseibeh	2023
P88	Fundamentalists, Integrationists, & Transformationists: An Empirical Theory of Men Software Engineers' Orientations in Gender Inequalities	Yi Wang, Kexin Zhao, Travis Green, Qinghua Lu	2023
P89	Draw a Software Engineer Test - An Investigation into Children's Perceptions of Software Engineering Profession	Letizia Jaccheri, Claudia Maria Cutrupi, Irene Zanardi	2023
P90	Benefits and Limitations of Remote Work to LGBTQIA+ Software Professionals	Ronnie de Souza Santos, Cleyton Vanut Cordeiro de Magalhães, Paul Ralph	2023
P91	Hackathons as Inclusive Spaces for Prototyping Software in Open Social Innovation with NGOs	Kiev Gama, George Valenca, Candy Estelle Marques Laurrendon, Ajo Nasidi Marques, Lu is Eduardo Ramos, Ravena Amaral, Clarissa Maria Dubeux Lopes Barros, Guilherme Xavier	2023
P92	Along the Margins: Marginalized Communities' Ethical Concerns about Social Platforms	Lauren Olson, Emitzá Guzmán, Florian Kunneman	2023
P93	Do Users Act Equitably? Understanding User Bias Through a Large In-person Study	Yang Liu, Heather Moses, Mark Sternefeld, Samuel Malachowsky, Daniel E. Krutz	2023
P94	Developing Software for Low Socio-Economic End Users: Lessons Learned from A Case Study of Fisherfolk Communities in Bangladesh	Tanjila Kanij, Misita Zhan, Md Khalid Hossain, Adnan Abdul-Mageed	2023
P95	Walking Down the Road to Independent Mobility: An Adaptive Route Training System for the Cognitively Impaired	Konstantin Rink, Tristan Gruschka, Gudrun Dobsław	2023
P96	Diversity Awareness in Software Engineering Participant Research	Riya Dutta, Diego Elias Costa, Emad Shihab, Torsten Tajmel	2023
P97	Harmful Terms in Computing: Towards Widespread Detection and Correction	Hana Winchester, Alicia E. Boyd, Brittany Johnson	2023

P98	Metamorphic Testing and Debugging of Tax Preparation Software	Saeid Tizpaz-Niari, Verrya Monjezi, Markus Wagner, Sam Darian, Kimberly Reed, Ashutosh Trivedi	2023
P99	Treat societally impactful scientific insights as open-source software artifacts	Cynthia C. S. Liem, Andrew M. Demetriou	2023
P100	Contradicting Motivations in Civic Tech Software Development: Analysis of a Grassroots Project	Antti Knutas, Dominik Siemon, Natasha Tylosky	2023
P101	Software Engineering for Smart Things in Public Spaces: Initial Insights and Challenges	Amna Batool, Seng W. Loke, Niroshinie Fernando, Jonathan Kua	2023
P102	A Novel Approach to Improving the Digital Literacy of Older Adults	Mehr Vaswani, Dharini Balasubramaniam, Kenneth Boyd	2023
P103	Values@Runtime: An Adaptive Framework for Operationalising Values	Amel Bennaceur, Diane Hassett, Bashar Nuseibeh, Andrea Zisman	2023
P104	Gender Representation Among Contributors to Open-Source Infrastructure : An Analysis of 20 Package Manager Ecosystems	Huilian Sophie Qiu, Zihe H. Zhao, Tiffany K. Yu, Justin Wang, Andy Ma, Hongbo Fang	2023
P105	Workplace Discrimination in Software Engineering: Where We Stand Today	Xin Zhao, Riley Young	2023
P106	With Great Humor Comes Great Developer Engagement	D. Tiwari; T. Toady; M. Monperrus; B. Baudry	2024
P107	Energy Patterns for Web: An Exploratory Study	P. Rani; J. Zellweger; V. Kousadianos; L. Cruz; T. Kehrer; A. Bacchelli	2024
P108	Micro-inequities and immigration backgrounds in the software industry	V. Markulj; K. Aslam; E. Guzmán	2024
P109	Alexa, is the skill always safe? Uncover Lenient Skill Vetting Process and Protect User Privacy at Run Time	T. Le; D. Zhao; Z. Wang; X. Wang; Y. Tian	2024
P110	An Empirical Study on Compliance with Ranking Transparency in the Software Documentation of EU Online Platforms	F. Sovrano; M. Lognoul; A. Bacchelli	2024
P111	Challenges, Strengths, and Strategies of Software Engineers with ADHD: A Case Study	G. Liebel; N. Langlois; K. Gama	2024
P112	Exposing Algorithmic Discrimination and Its Consequences in Modern Society: Insights from a Scoping Study	R. S. Dehal; M. Sharma; R. de Souza Santos	2024
P113	Dealing With Cultural Dispersion: a Novel Theoretical Framework for Software Engineering Research and Practice	S. Lambiase; G. Catolino; B. Della Piana; F. Ferrucci; F. Palomba	2024
P114	Beyond Self-Promotion: How Software Engineering Research Is Discussed on LinkedIn	M. Wyrich; J. Bogner	2024
P115	Impostor Phenomenon in Software Engineers	P. Guenes; R. Tomaz; M. Kalinowski; M. T. Baldassarre; M. -A. Storey	2024
P116	Exploring Assessment Criteria for Sustainable Software Engineering Processes	M. Wahler; N. Seyff; M. S. S. Ramirez	2024
P117	Adaptive User Interfaces for Software Supporting Chronic Disease	W. Wang; H. Khalajzadeh; J. Grundy; A. Madugalla; H. O. Obie	2024
P118	A Synthesis of Green Architectural Tactics for ML-Enabled Systems	H. Järvenpää; P. Lago; J. Bogner; G. Lewis; H. Muccini; I. Ozkaya	2024

P119	Greening Large Language Models of Code	J. Shi; Z. Yang; H. J. Kang; B. Xu; J. He; D. Lo	2024
P120	Navigating the Path of Women in Software Engineering: From Academia to Industry	T. Oliveira; A. Barcomb; R. de Souza Santos; H. Barros; M. T. Baldassarre; C. França	2024
P121	Early Career Software Developers -Are You Sinking or Swimming?	X. Zhao; N. Tsuboi	2024
P122	Towards Engineering Fair and Equitable Software Systems for Managing Low-Altitude Airspace Authorizations	U. Gohar; M. C. Hunter; A. Marczak-Czajka; R. R. Lutz; M. B. Cohen; J. Cleland-Huang	2024
P123	What Can Requirements Engineering Do for Emerging System of Systems? Case of Smart Local Energy	R. Chitchyan	2024