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This volume is dedicated to the memory of Camil Demetrescu and Eelco Visser.

■ Contents

Message from the Program Chairs <i>Karim Ali and Jan Vitek</i>	0:xi
Message from the Artifact Evaluation Chairs <i>Alessandra Gorla and Stefan Winter</i>	0:xiii
Foreword by the President of AITO <i>Eric Jul</i>	0:xv
Authors	0:xvii–0:xx

Regular Papers

Verified Compilation and Optimization of Floating-Point Programs in CakeML <i>Heiko Becker, Robert Rabe, Eva Darulova, Magnus O. Myreen, Zachary Tatlock, Ramana Kumar, Yong Kiam Tan, and Anthony Fox</i>	1:1–1:28
Elementary Type Inference <i>Jinxu Zhao and Bruno C. d. S. Oliveira</i>	2:1–2:28
Automatic Root Cause Quantification for Missing Edges in JavaScript Call Graphs <i>Madhurima Chakraborty, Renzo Olivares, Manu Sridharan, and Behnaz Hassanshahi</i>	3:1–3:28
Stay Safe Under Panic: Affine Rust Programming with Multiparty Session Types <i>Nicolas Laguardie, Rumyana Neykova, and Nobuko Yoshida</i>	4:1–4:29
How to Take the Inverse of a Type <i>Daniel Marshall and Dominic Orchard</i>	5:1–5:27
Compiling Volatile Correctly in Java <i>Shuyang Liu, John Bender, and Jens Palsberg</i>	6:1–6:26
Functional Programming with Datalog <i>André Pacak and Sebastian Erdweg</i>	7:1–7:28
Design-By-Contract for <i>Flexible</i> Multiparty Session Protocols <i>Lorenzo Gheri, Ivan Lanese, Neil Sayers, Emilio Tuosto, and Nobuko Yoshida</i> ...	8:1–8:28
A Deterministic Memory Allocator for Dynamic Symbolic Execution <i>Daniel Schemmel, Julian Büning, Frank Busse, Martin Nowack, and Cristian Cadar</i>	9:1–9:26
Accumulation Analysis <i>Martin Kellogg, Narges Shadab, Manu Sridharan, and Michael D. Ernst</i>	10:1–10:30
Concolic Execution for WebAssembly <i>Filipe Marques, José Fragoso Santos, Nuno Santos, and Pedro Adão</i>	11:1–11:29
Defining Corecursive Functions in Coq Using Approximations <i>Vlad Rusu and David Nowak</i>	12:1–12:24

REST: Integrating Term Rewriting with Program Verification <i>Zachary Grannan, Niki Vazou, Eva Darulova, and Alexander J. Summers</i>	13:1–13:29
Static Analysis for AWS Best Practices in Python Code <i>Rajdeep Mukherjee, Omer Tripp, Ben Liblit, and Michael Wilson</i>	14:1–14:28
What If We Don't Pop the Stack? The Return of 2nd-Class Values <i>Anzhelo Xhebraj, Oliver Bračevac, Guannan Wei, and Tiark Rompf</i>	15:1–15:29
Maniposynth: Bimodal Tangible Functional Programming <i>Brian Hempel and Ravi Chugh</i>	16:1–16:29
Synchron – An API and Runtime for Embedded Systems <i>Abhiroop Sarkar, Bo Joel Svensson, and Mary Sheeran</i>	17:1–17:29
Direct Foundations for Compositional Programming <i>Andong Fan, Xuejing Huang, Han Xu, Yaozhu Sun, and Bruno C. d. S. Oliveira</i>	18:1–18:28
Low-Level Bi-Abduction <i>Lukáš Holík, Petr Peringer, Adam Rogalewicz, Veronika Šoková, Tomáš Vojnar, and Florian Zuleger</i>	19:1–19:30
Functional Programming for Distributed Systems with XC <i>Giorgio Audrito, Roberto Casadei, Ferruccio Damiani, Guido Salvaneschi, and Mirko Viroli</i>	20:1–20:28
PEDROID: Automatically Extracting Patches from Android App Updates <i>Hehao Li, Yizhuo Wang, Yiwei Zhang, Juanru Li, and Dawu Gu</i>	21:1–21:31
Ferrite: A Judgmental Embedding of Session Types in Rust <i>Ruo Fei Chen, Stephanie Balzer, and Bernardo Toninho</i>	22:1–22:28
A Self-Dual Distillation of Session Types (Pearl) <i>Jules Jacobs</i>	23:1–23:22
JavaScript Sealed Classes <i>Manuel Serrano</i>	24:1–24:27
Union Types with Disjoint Switches <i>Baber Rehman, Xuejing Huang, Ningning Xie, and Bruno C. d. S. Oliveira</i>	25:1–25:31
Fair Termination of Multiparty Sessions <i>Luca Ciccone, Francesco Dagnino, and Luca Padovani</i>	26:1–26:26
API Generation for Multiparty Session Types, Revisited and Revised Using Scala 3 (Pearl) <i>Guillermína Cledou, Luc Edixhoven, Sung-Shik Jongmans, and José Proença</i>	27:1–27:28
Global Type Inference for Featherweight Generic Java <i>Andreas Stadelmeier, Martin Plümicke, and Peter Thiemann</i>	28:1–28:27
Experience: Model-Based, Feedback-Driven, Greybox Web Fuzzing with BackREST <i>François Gauthier, Behnaz Hassanshahi, Benjamin Selwyn-Smith, Trong Nhan Mai, Max Schlüter, and Micah Williams</i>	29:1–29:30

QILIN: A New Framework For Supporting Fine-Grained Context-Sensitivity in Java Pointer Analysis <i>Dongjie He, Jingbo Lu, and Jingling Xue</i>	30:1–30:29
NWGraph: A Library of Generic Graph Algorithms and Data Structures in C++20 <i>Andrew Lumsdaine, Luke D’Alessandro, Kevin Deweese, Jesun Firoz, Xu Tony Liu, Scott McMillan, John Phillip Ratzloff, and Marcin Zalewski</i>	31:1–31:28

Extended Abstracts

Vincent: Green Hot Methods in the JVM <i>Kenan Liu, Khaled Mahmoud, Joonhwan Yoo, and Yu David Liu</i>	32:1–32:30
Hinted Dictionaries: Efficient Functional Ordered Sets and Maps <i>Amir Shaikhha, Mahdi Ghorbani, and Hesam Shahrokhi</i>	33:1–33:3
Slicing of Probabilistic Programs Based on Specifications <i>Marcelo Navarro and Federico Olmedo</i>	34:1–34:2
Prisma: A Tierless Language for Enforcing Contract-Client Protocols in Decentralized Applications <i>David Richter, David Kretzler, Pascal Weisenburger, Guido Salvaneschi, Sebastian Faust, and Mira Mezini</i>	35:1–35:4

■ Message from the Program Chairs

Started in 1987, ECOOP is Europe's oldest programming conference, welcoming papers on all practical and theoretical investigations of programming languages, systems and environment providing innovative solutions to real problems as well as evaluations of existing solutions. Papers were submitted to one of four categories: *Research* for papers that advance the state of the art in programming; *Reproduction* for empirical evaluations that reconstructs a published experiment in a different context in order to validate the results of that earlier work; *Experience* for applications of known techniques in practice; and *Pearl* for papers that either explain a known idea in an elegant way or unconventional papers introducing ideas that may take some time to substantiate. ECOOP is a selective venue, with acceptance, by tradition, capped at 25% of all submissions and re-submissions. The chairs thank the Program Committee: A. Donaldson, B. Hermann, M. Sridharan, S. Alimadadi, A. Bieniusa, S. Blackburn, S. Blazy, E. Brady, L. Bulej, S. Chiba, A. Cohen, E. Darulova, W. De Meuter, D. Dreyer, S. Drossopoulou, S. Ducasse, S. Erdweg, S. Fowler, J. Franco, D. Garg, S. Gay, J. Gibbons, E. Gonzalez Boix, P. Haller, R. Hirschfeld, T. Hosking, D. Lea, M. Luján, M. Madsen, A. Møller, J. Noble, M. Odersky, B. C.d.S. Oliveira, K. Ostermann, T. Petricek, A. Potanin, M. Rapoport, M. Rigger, G. Salvaneschi, T. Schrijvers, M. Serrano, A. Silva, E. Tosch, L. Tratt, V. Vasconcelos, E. Visser, T. Wrigstad, T. Xie, J. Xue, E. Zucca. We thank the Extended Review Committee: Q. Stiévenart, C. Koparkar, K. Narasimhan, S. Singh, J. Yang, L. De Simone, M. Jimenez, T. Nakamaru, J. Immanuel Brachthäuser, O. Bračevac, J. Norlinder, D. He, C. Zhang, M. Kruliš, V. Dort, V. Horiky, W. Ye, B. Rehman, K. Marussy, P. Koronkevich, H. Dang, A. Tondwalkar, I. Kabir, A. Renda, M. Chiari, O. Flückiger, P. Maj, C. Hsieh, M. Raab, M. Schröder, D. Justo, L. Schütze, P. Weisenburger, E. D'Ousualdo, S. Keuchel, J. An, S. Keidel, P. Rein, T. Mattis, A. Gorla, S. Winter. This year saw a number of innovations:

- **Multiple rounds.** ECOOP has two main rounds of submissions per year. Each round supports both minor and major revisions. Major revisions are handled in the next round (either the same year or the next) by the same reviewers.
- **No format or length restrictions.** In order to reduce friction for authors, papers can come in any format and at any length. This applies to submissions, final versions must abide by the publisher's requirements.
- **Artifacts and Papers together.** Every submitted paper can be accompanied with an artifact, submitted 10 days after the paper. Both submission are evaluated in parallel by overlapping committees as members of the artifact evaluation committee were invited to serve on the conference review committee.
- **Journal First/Last.** Papers can be submitted either one of three associated journals and be invited to present at the meeting. Furthermore, some accepted papers can be forward to journals.

Overall, we found these innovations to have worked well. Clearly more experience is needed to draw any broader conclusions. We do encourage future chair to keep experimenting.

Karim Ali Jan Vitek

■ Message from the Artifact Evaluation Chairs

ECOOP has a long-standing tradition of offering artifact evaluation dating back to 2013. For the first time this year, though, the artifact evaluation process involved every single paper submission to ECOOP 2022, rather than just accepted papers, and happened in parallel with the paper review process. Besides providing feedback on the artifacts irrespective of paper acceptance, evaluation results were made available to the technical PC. Artifact submissions could thus provide more insights on the technical contributions described in the papers, and help to improve the overall review process.

To handle the higher review load that such a process entails, we recruited an artifact evaluation committee that was almost twice as large as for last year's ECOOP and included both experienced and novice artifact reviewers. The submission deadlines for artifacts were just 10 days after the paper deadlines for both submission rounds. We received a total of 57 submissions (39 for R1 and 18 for R2). After a kick-the-tires review and author response phase, during which authors had the opportunity to clarify or address technical issues with their submissions, each submitted artifact was reviewed by at least three committee members, leading to an overall review load of 4–5 artifact reviews per committee member.

Following the positive experience with adopting ACM's artifact badges for ECOOP 2021, we adopted the same badging policies for ECOOP 2022. The artifact evaluation committee positively evaluated 46 submissions (33/13 for R1/R2) as *functional* or *reusable*, out of which 25 belong to papers to appear in the technical program of ECOOP 2022. Seven submitted artifacts (4/3 in R1/R2) that did not pass the bar for the *functional* and *reusable* badges, were found eligible for the *available* badge, 2 of which are associated with papers accepted for presentation at ECOOP 2022 (both from R1).

To streamline the artifact review process and to decouple artifact from paper review aspects, we asked authors to submit documentation of explicit *claims* in a pre-specified format that the artifact evaluation committee checked the artifacts against. At the same time, the PC could assess the *importance of these claims* for the submitted papers as a frame of reference for the strength of support for the paper that an artifact can provide. This separation greatly facilitated the artifact evaluation committee's discussions regarding which badges to award. The details of this process are documented in the call for artifacts (<https://doi.org/10.5281/zenodo.6553744>), the artifact submission template (<https://doi.org/10.5281/zenodo.5720714>), and an artifact review template (<https://doi.org/10.5281/zenodo.5750738>) that we provided as guidance for artifact reviewers in addition to prior community guidance linked from the call for artifacts.

The smooth and thorough artifact evaluation process would have not been possible without the 39 members of the committee, who handled the artifact review workload and contributed to the technical PC discussions with great dedication. For this reason, we would like to thank them for their valuable work and the inspiring discussions.

Alessandra Gorla

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■ Foreword by the President of AITO


Welcome back to a physical conference – after two years of pandemic, we are again able to hold a non-virtual conference. Corona has changed the world – there certainly will be more virtual interaction than before – witness VCOOP. Will physical conferences survive this seismic shift in ways to interact? Well, perhaps if the traditional conference format is adjusted to the new times. The ECOOP 2022 team has done a tremendous job of reigniting ECOOP – a huge thank to them and their efforts – which have appeared to pay off, as both paper submission, attendance, and the number of workshops has increased. AITO will continue to explore new ways of adapting to the changing realities that scientific conferences face today – as spearheaded by the ECOOP 2022 organizers – we look forward to a really good conference with lots of great paper, personal interaction, excellent keynotes – including a Dahl-Nygaard Senior winner, Dan Ingalls. Enjoy the conference – and modern-day Berlin.

Eric Jul
AITO President




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