10th International Conference on Interactive Theorem Proving

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Contents

Preface John Harrison, John O'Leary, and Andrew Tolmach	0:ix
Invited Talks	
A Million Lines of Proof About a Moving Target June Andronick	1:1–1:1
What Makes a Mathematician Tick? Kevin Buzzard	2:1-2:1
An Increasing Need for Formality Martin Dixon	3:1-3:1
Regular Papers	
A Verified Compositional Algorithm for AI Planning Mohammad Abdulaziz, Charles Gretton, and Michael Norrish	4:1-4:19
Proving Tree Algorithms for Succinct Data Structures Reynald Affeldt, Jacques Garrigue, Xuanrui Qi, and Kazunari Tanaka	5:1–5:19
Data Types as Quotients of Polynomial Functors Jeremy Avigad, Mario Carneiro, and Simon Hudon	6:1–6:19
Primitive Floats in Coq Guillaume Bertholon, Érik Martin-Dorel, and Pierre Roux	7:1-7:20
A Certificate-Based Approach to Formally Verified Approximations Florent Bréhard, Assia Mahboubi, and Damien Pous	8:1-8:19
Higher-Order Tarski Grothendieck as a Foundation for Formal Proof Chad E. Brown, Cezary Kaliszyk, and Karol Pąk	9:1-9:16
Generic Authenticated Data Structures, Formally Matthias Brun and Dmitriy Traytel	10:1-10:18
A Verified and Compositional Translation of LTL to Deterministic Rabin Automata	
Julian Brunner, Benedikt Seidl, and Salomon Sickert	11:1–11:19
Mario Carneiro	12:1-12:17
Coq and Isabelle Ran Chen, Cyril Cohen, Jean-Jacques Lévy, Stephan Merz, and Laurent Théry	13:1-13:19
First-Order Guarded Coinduction in Coq <i>Lukasz Czajka</i>	14:1-14:18



0:vi Contents

Formalizing the Solution to the Cap Set Problem Sander R. Dahmen, Johannes Hölzl, and Robert Y. Lewis	15:1–15:19
Nine Chapters of Analytic Number Theory in Isabelle/HOL	
Manuel Eberl	16:1-16:19
A Certifying Extraction with Time Bounds from Coq to Call-By-Value λ -Calculus $Yannick\ Forster\ and\ Fabian\ Kunze$	17:1–17:19
Formal Proof and Analysis of an Incremental Cycle Detection Algorithm Armaël Guéneau, Jacques-Henri Jourdan, Arthur Charguéraud, and François Pottier	18:1-18:20
A Formalization of Forcing and the Unprovability of the Continuum Hypothesis Jesse Michael Han and Floris van Doorn	19:1–19:19
Refinement with Time – Refining the Run-Time of Algorithms in Isabelle/HOL Maximilian P. L. Haslbeck and Peter Lammich	20:1-20:18
Virtualization of HOL4 in Isabelle Fabian Immler, Jonas Rädle, and Makarius Wenzel	21:1-21:18
Generating Verified LLVM from Isabelle/HOL Peter Lammich	22:1-22:19
Proof Pearl: Purely Functional, Simple and Efficient Priority Search Trees and Applications to Prim and Dijkstra Peter Lammich and Tobias Nipkow	23:1-23:18
A Verified LL(1) Parser Generator Sam Lasser, Chris Casinghino, Kathleen Fisher, and Cody Roux	24:1-24:18
Binary-Compatible Verification of Filesystems with ACL2 Mihir Parang Mehta and William R. Cook	25:1-25:18
Ornaments for Proof Reuse in Coq Talia Ringer, Nathaniel Yazdani, John Leo, and Dan Grossman	26:1-26:19
Verifying That a Compiler Preserves Concurrent Value-Dependent Information-Flow Security Robert Sison and Toby Murray	27:1-27:19
Quantitative Continuity and Computable Analysis in CoQ Florian Steinberg, Laurent Théry, and Holger Thies	
Deriving Proved Equality Tests in Coq-Elpi: Stronger Induction Principles for Containers in Coq Enrico Tassi	29:1-29:18
Complete Non-Orders and Fixed Points Akihisa Yamada and Jérémy Dubut	30:1-30:16
Verified Decision Procedures for Modal Logics Minchao Wu and Rajeev Goré	31:1-31:19
Characteristic Formulae for Liveness Properties of Non-Terminating CakeML Programs Johannes Åman Pohjola, Henrik Rostedt, and Magnus O. Myreen	32:1-32:19

Contents 0:vii

Short Papers

The DPRM Theorem in Isabelle	
Jonas Bayer, Marco David, Abhik Pal, Benedikt Stock, and Dierk Schleicher	33:1-33:7
Hammering Mizar by Learning Clause Guidance	
Jan Jakubův and Josef Urban	34:1-34:8
Declarative Proof Translation	
Cezary Kaliszyk and Karol Pąk	35:1-35:7
Formalization of the Domination Chain with Weighted Parameters	
Daniel E. Severín	36:1-36:7

Preface

The International Conference on Interactive Theorem Proving (ITP) is the main venue for the presentation of research into interactive theorem proving frameworks and their applications. It has evolved organically starting with a HOL workshop back in 1988, gradually widening to include other higher-order systems and interactive theorem provers generally, as well as their applications. This year's conference, in Portland OR, USA, is the tenth to be held under the ITP name, following Edinburgh 2010, Nijmegen 2011, Princeton 2012, Rennes 2013, Vienna 2014, Nanjing 2015, Nancy 2016, Brasilia 2017 and Oxford 2018; those in 2010, 2014 and 2018 were under the umbrella organization of the Federated Logic Conference (FLoC).

This year's conference attracted a total of 72 submissions (61 long papers and 11 short papers); with the exception of the very first ITP in 2010 (which received 74 submissions) this is the largest number of submissions received by ITP or its predecessor conferences. Each paper was systematically reviewed by at least three program committee members or appointed external reviewers, as a result of which the PC winnowed down the selection to be presented at the conference: 33 papers (29 long papers and 4 short). As a consequence of limited time for presentation at the conference, many interesting papers had to be rejected. We thank the authors of both accepted and rejected papers for their submissions, as well as the PC members and external reviewers for their invaluable work.

As well as all the regular papers, we are very pleased to have invited keynote talks by June Andronick (Data 61, CSIRO), Kevin Buzzard (Imperial College) and Martin Dixon (Intel).

The present volume collects all the accepted papers contributed to the conference as well as abstracts of the three invited presentations. This year, for the first time, we are publishing the proceedings in the LIPIcs series, motivated by its commitment to open access. We thank all those at Dagstuhl for their responsive feedback on all matters associated with the production of the finished proceedings.

Finally, we are grateful to Portland State University for logistical support, to several corporate donors who helped to support the conference, and to the ITP Steering Committee for their guidance throughout.

July 2019

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