THE EATCS Award 2022

PATRICK COUSOT

The EATCS Award 2022 is awarded to

Patrick Cousot

Patrick Cousot and his late wife Radhia Cousot introduced and developed the framework of abstract interpretation for program analysis. Abstract interpretation formalizes the interplay of static abstraction with dynamic execution for reasoning about the correctness of programs. Since its introduction in 1977, abstract interpretation has become one of the fundamental concepts in programming languages and compiler optimization and has greatly influenced the theory and practice of many related fields, from verification and software engineering to real-time systems and security. Dozens of new instantiations, extensions, and applications of the framework are published every year. Patrick has devoted a lifetime of research to abstract interpretation, having not only formulated the elegant mathematics that lies at the core the framework, but also leading its transition to industrial use, most notably through the Astree project for the analysis of avionics and space software. Recently Patrick summarized his life's work in the textbook "Principles of Abstract Interpretation."

The EATCS Award Committee 2022

- Éva Tardos (chair)
- Johan Håstad
- Thomas Henzinger

The award will be presented at ICALP 2022, in Paris.

The EATCS annually honors a respected scientist from our community with this prestigious EATCS Distinguished Achievements Award, to acknowledge extensive and widely recognized contributions to theoretical computer science over a life long scientific career (see http://eatcs.org/index.php/eatcs-award for more information, including the list of previous recipients)

The following is the list of the previous recipients of the EATCS Awards:

2021 Toniann (Toni) Pitassi
2020 Mihalis Yannakakis
2019 Thomas Henzinger
2018 Noam Nisan
2017 Éva Tardos
2016 Dexter Kozen
2015 Christos Papadimitriou
2014 Gordon Plotkin
2013 Martin Dyer
2012 Moshe Y. Vardi
2011 Boris (Boaz) Trakhtenbrot

2010 Kurt Mehlhorn 2009 Gérard Huet 2008 Leslie G. Valiant 2007 Dana S. Scott 2006 Mike Paterson 2005 Robin Milner 2004 Arto Salomaa 2003 Grzegorz Rozenberg 2002 Maurice Nivat 2001 Corrado Böhm 2000 Richard Karp