THE PRESBURGER AWARD 2012 Laudatio for Erik Demaine

The Presburger Award Committee 2013, consisting of Peter Widmayer, Antonin Kucera, and Monika Henzinger (chair), has unanimously decided to propose

Erik Demaine (MIT, USA)

as recipient of the 2013 EATCS Presburger Award for young scientists.

Erik Demaine, born in 1981, has made outstanding contributions in several fields of algorithms, namely computational geometry, data structures, graph algorithms and recreational algorithms.

In data structures he has solved or made significant progress on classic problems such as the carpenter's rule problem, the hinged-dissection problem, the prefix-sum problem, and the dynamic optimality conjecture.

In computational geometry he used the powerful theory of graph minors to develop a suite of algorithms for approximately solving a general family of intractable problems. He also started the new field of computational origami, where his book is the leading authority in the field.

His work has shown promising applications to computer graphics, sensor networks, molecular biology, programmable matter, and manufacturing and engineering.

The committee recommends Erik Demaine as an exceptional young scientist that fully deserves the Presburger Award.

The committee would also like to mention that the quality of all nominations submitted this year was very high. The Presburger Award is attracting the best young scientists in the field of theoretical computer science worldwide.