



2004			For pioneering work on internetworking, including the design and implementation of the Internet's basic communications protocols, TCP/IP, and for inspired leadership in networking.	
	Bob Kahn			
2005	Peter Naur		For fundamental contributions to programming language design and the definition of ALGOL 60, to compiler design, and to the art and practice of computer programming.	
2006	Frances E. Allen		For pioneering contributions to the theory and practice of optimizing compiler techniques that laid the foundation for modern optimizing compilers and automatic parallel execution.	
2007	Edmund M. Clarke		For their roles in developing model checking into a highly effective verification technology, widely adopted in the	
	E. Allen Emerson		hardware and software industries. <sup>[37]</sup>	
,	Joseph Sifakis			
2008	Barbara Liskov		For contributions to practical and theoretical foundations of programming language and system design, especially related to data abstraction, fault tolerance, and distributed computing.	
2009	Charles P. Thacker		For his pioneering design and realization of the Xerox Alto, the first modern personal computer, and in addition for his contributions to the Ethernet and the Tablet PC.	
2010	Leslie Valiant		For transformative contributions to the theory of computation including the theory of probably approximately correct (PAC) learning, the complexity of enumeration and of algebraic computation, and the theory of parallel and distributed computing.	
2011	Judea Pearl <sup>[38]</sup>		For fundamental contributions to artificial intelligence through the development of a calculus for probabilistic and causal reasoning. <sup>[39]</sup>	
2012	Silvio Micali		For transformative work that laid the complexity-theoretic foundations for the science of cryptography and in the process pioneered new methods for efficient verification of	
	Shafi Goldwasser		mathematical proofs in complexity theory. <sup>[40]</sup>	

#### con la abstracción de datos, la tolerancia a

### fallas y la computación distribuida.

### Por contribuciones a los fundamentos prácticos

### y teóricos del lenguaje de programación y el

### diseño de sistemas, especialmente relacionados



# Turing Award

## Substitución de Liskov

## debería poder ser sustituida por cualquier instancia

## "Siendo U un subtipo de T, cualquier instancia de T

## de U sin alterar las propiedades del sistema"

