The Computing Universe

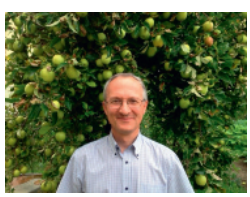
A Journey through a Revolution

Computers now impact almost every aspect of our lives, from our social interactions to the safety and performance of our cars. How did this happen in such a short time? And this is just the beginning.…

In this book, Tony Hey and Gyuri Pápay lead us on a journey from the early days of computers in the 1930s to the cutting-edge research of the present day that will shape computing in the coming decades. Along the way, they explain the ideas behind hardware, software, algorithms, Moore's law, the birth of the personal computer, the Internet and the web, the Turing Test, IBM's *Jeopardy!*-beating Watson, World of Warcraft, spyware, Google, Facebook, and quantum computing. This book also introduces the fascinating cast of dreamers and inventors who brought these great technological developments into every corner of the modern world.

This exciting and accessible introduction will open up the universe of computing to anyone who has ever wondered where his or her smart phone came from and where we may be going in the future.

TONY HEY is vice president of Microsoft Research and has published more than 150 research papers and several books, including *Gauge Theories in Particle Physics* (fourth edition, 2012, with Ian Aitchison), *The New Quantum Universe* (second edition, 2003, with Patrick Walters), *Einstein's Mirror* (1997, with Patrick Walters), and *The Fourth Paradigm* (2009, edited with Stewart Tansley and Kristin Tolle).



GYURI PÁPAY is a senior research Fellow at the IT Innovation Centre at Southampton University, U.K. His main research interests are high-performance computing, event simulations, and numerical algorithms.

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Tony Hey
Microsoft Research, Redmond, Washington

Gyuri Pápay
IT Innovation Centre, Southampton, U.K.

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