makes coding stand out.

Thompson also explores more serious and controversial aspects of the profession. He analyses political leanings, finding that although coders seem to have an affinity for libertarian ideals, many adhere to a blend of left and right. He extensively discusses diversity (especially gender) — or the lack of it — in computing as a whole, and chronicles the sharp decline in the number of women participating in coding over the past decades. He passionately debunks the idea that coding is a meritocracy, citing education and luck as key factors contributing to success. He also digs deep into hacker culture and cyberpunk; the ‘crypto wars’ in which governments have tried to limit access to strong cryptography techniques; and issues of copyright and privacy.

Thompson also looks at more contemporary topics, such as racial bias in artificial intelligence. And he explores social media’s negative impact on society and democracy. For example, Facebook’s news feed inadvertently aided misinformation campaigns during the 2016 US presidential election (see A. Klimestone *Nature* 562, 188–189; 2018). Even more ominous is our dependence on information technology, from algorithmic recommendations for news feeds to electronic voting systems that opaquey calculate winners. The smooth functioning of the world depends on coders writing solid and secure code, but that is neither sufficient nor guaranteed.

Many books have covered this territory, but *Coders* is bang up to date in a fast-moving world. We meet some of the field’s biggest players, such as BitTorrent inventor Bram Cohen. Furthermore, by combining his own research with material from copious sources in print and online, Thompson has unearthed some delightful details, such as a T-shirt reading “Think Bad. Do Good” (which can mean, for instance, that to write a secure system, you have to know how ‘bad guys’ might try to break in).

As a computer scientist and former coder, I found that many passages elicited a quiet smile and a moment of self-recognition. People who interact with coders routinely, as colleagues, friends or family, could benefit tremendously from these insights. I can imagine chief executives ordering bundles of this book for employees.

Interestingly, coders might get even more out of the book. They already know the technical terms, would appreciate the analogies (“refactoring software is like editing an article”) and would perhaps understand themselves a little better. Perhaps they’ll give it to loved ones, with a note attached: “Read this, that’s me!”

Li Gong is chief executive of Linaro, a software company based in Cambridge, UK. e-mail: li.gong@linaro.org

---

### Books in brief

#### Making Eden
*David Beerling* Oxford University Press (2019)

Some 2 billion years ago, a single-celled organism in Earth’s primeval ocean engulfed a mitochondrion and a cyanobacterium — and, now able to generate energy and photosynthesize, shunted off to change the world. The ancestor of green plants had begun its journey. Ferns, forests and grasses ultimately furred our planet’s story surface, sculpting land and climate and paving the way for animals. This wonderful study by palaeobotanist David Beerling unearths some delightful details, such as elephant seals, giant kelp and emperor penguins. McCann deftly navigates both natural glories and archival complexities.

#### Wild Sea
*Joy McCann* University of Chicago Press (2019)

Wilderness seekers will rejoice in this stirring portrait of Earth’s most remote sea: the Southern Ocean. Environmental historian Joy McCann reveals how the vast circumpolar churn of ice, wind, waters and fog flowing north of Antarctica has illuminated understanding of climate change. For centuries, scientists and explorers from James Cook and Charles Darwin to Isabel Bennett have battled ferocious conditions to map the region, probe its weather and study iconic species such as elephant seals, giant kelp and emperor penguins. McCann deftly navigates both natural glories and archival complexities.

#### Losing Earth

There was a point four decades ago, writes Nathaniel Rich, when the science on climate change nearly sparked a US energy revolution. A few years after, the seeds of denialism were sown. Rich brilliantly relates the story of how, in 1979, a loose alliance — including environmental lobbyist Rafe Pomerance, climate researchers Gordon MacDonald and oceanographer Carl Wunsch — alerted policymakers to the existential threat, only to see climate treaties fail in a welter of ‘profit over planet’ a decade later. An eloquent science history, and an urgent eleventh-hour call to save what we can save.

#### Experiencing the Impossible
*Gustav Kuhn* MIT Press (2019)

Flummoxed by a fiendish card trick? You’re not alone: magic continues to astonish many, well into adulthood. In this absorbing study, psychologist-magician Gustav Kuhn reveals that magic creates cognitive conflict, so that perceiving an ‘impossible’ event bewitches us. He trawls its history (from Jean-Eugène Robert-Houdin’s astounding 1840s ‘ethereal levitation’ trick to stage hypnosis); shows how the misdirection of attention, say, plays with the peculiarities of our visual systems and memories; and proposes a science of magic. A fascinating foray into the subtle mechanics of creating wonder.

#### The Nocturnal Brain

Consultant neurologist Guy Leschziner specializes in sleep disorders: lucid dreaming, narcolepsy, insomnia, sleep paralysis and other conditions sparked by neurological, environmental, genetic and psychological factors. With compassion and acuity, he delves into patients’ nocturnal hallucinations, out-of-sync circadian clocks, and even episodes of driving during slumber. He explicates the known science, and discusses theories and treatments critically, but this is a narrative that inevitably circles back to the heavy human cost of lost sleep and disrupted dreams. Barbara Kiser