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31 December 2018 - 4 January 2019

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5G
5G Is Coming This Year. Here's What You Need to Know

"In 2019, a big technology shift will finally begin. It's a once-in-a-decade upgrade to our wireless systems that will start reaching mobile phone users in a matter of months."
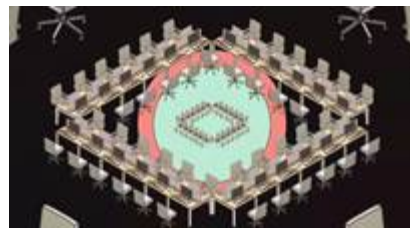
Source: The New York Times (31 December 2018)

ARCHITECTURE
Arch Daily 2018: The Best Architecture of the Year

"Rather than designing a pastoral respite for the public Tschumi's design took a microscope to the city itself, organising the landscape in a series of points, lines and surfaces. It's a design process that has been referenced in almost every urban design project since."
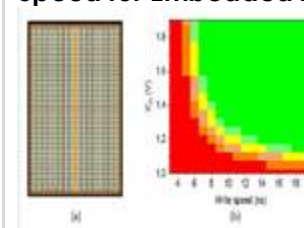
Source: Arch Daily (1 January 2019)

ARCHITECTURE
This Is the Architecture Trend That Needs to Die in 2019

"Open offices promised more collaboration – and thus more productivity – between workers. But a 2018 study out of Harvard Business School found that moving to open offices leads to a decrease in face-to-face interactions between employees."

Source: Fast Company (24 December 2018)

COMPUTER SCIENCE
Researchers Develop 128Mb STT-MRAM with World's Fastest Write Speed for Embedded Memory

"This is currently the world's fastest write speed for embedded memory application with a density over 100Mb and will pave the way for the mass-production of large capacity STT-MRAM."

Source: EurekAlert! (28 December 2018)

CONSUMER TECH
Seven Consumer Technology Trends to Watch Out for in the New Year

"2019 will see gadgets like gaming smartphones and wearable medical devices lifting the user experience to a whole new level."

Source: Live Mint (1 January 2019)

ECOMMERCE LOGISTICS
Shortening the Last Mile: Winning Logistics Strategies in the Race to the Urban Consumer

"This white paper will discuss in depth the evolution of the interaction between consumer and industry and the impact this has had in reshaping the future of the last mile."

Source: DHL (December 2018)

FOOD TECHNOLOGY
Innovations in Chocolate: How Are Food Technologists Bringing This Household Favorite into the Future?

"In the same way plastics are printed in layers from computer-aided design (CAD) software, chocolate can be put through a printer to create customizable goodies. 3D-printed chocolate."

Source: How It Works (January 2019)
Available @ SUTD Library (Call Number Q162 HOW)

HEALTHCARE
Leg Nerves Activated by Light Offer New Path to Restoring Mobility

"MIT researchers have shown that nerves made to express proteins that can be activated by light can produce limb movements that can be adjusted in real-time, using cues generated by the motion of the limb itself."

Source: MIT News (26 December 2018)

INTELLECTUAL PROPERTY
World Intellectual Property Indicators: Filings for Patents, Trademarks, Industrial Designs Reach New Records on Strength in China

"Worldwide demand for intellectual property (IP) tools reached record heights in 2017, with China driving the growth in filings for patents, trademarks, industrial designs and other IP rights that are at the heart of the global economy."

Source: WIPO (3 December 2018)

MEDICAL AI
The Surgical Singularity Is Approaching

"Given further development, we may soon see autonomous surgical robots with capacity to perform complex soft-tissue surgical procedures faster, more accurately and with fewer complications than human surgeons."

Source: Scientific American (27 December 2018)

MEGATRENDS
Megatrend Analysis: Putting the Consumer at the Heart of Business

"Megatrends are a hot topic but very few understand how to make sense of and apply megatrends to growth strategy. This white paper introduces the importance of megatrend analysis, provides a step-by-step process for conducting megatrend analysis …"

Source: Euromonitor (December 2018)

MOBILE PHONE
The Mobile World Might Finally Get Exciting Again in 2019

"With fewer big technical leaps between generations, there's plenty of evidence that consumers are starting to hit the snooze button on upgrading their phones … Here's a rundown of what we expect in the coming year, including tons of buzz at CES."

Source: CNET (28 December 2018)

PHYSICS
What to Look Forward to in 2019: Physics World Editors Make Their Predictions

"… our team of science journalists has risen to the challenge, and have picked out the projects, missions and research trends and that are set to make a splash in 2019."

Source: Physics World (1 January 2019)

TECHNOLOGICAL BREAKTHROUGHS
The Most Surprising Tech Breakthroughs of 2018

"As 2018 comes to a close, we can pause and reflect on some of the biggest technology breakthroughs and scientific discoveries that occurred this year."

Source: Singularity Hub (30 December 2018)

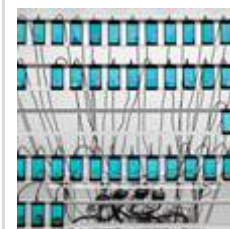
TECHNOLOGY FAILURES
The Biggest Technology Failures of 2018

"From gene-edited babies to guaranteed-fatal brain uploads, it was a bumper year for technology misfires and misuses."

Source: MIT Technology Review (27 December 2018)

THE INTERNET
How Much of the Internet Is Fake? Turns Out, a Lot of It, Actually.

"How much of the internet is fake? Studies generally suggest that, year after year, less than 60 percent of web traffic is human; some years, according to some researchers, a healthy majority of it is bot."

Source: New York Magazine (26 December 2018)