

1: Intelligent Machines: The jobs robots will steal first - BBC News

21 jobs where robots are already replacing humans on patients independently and replace human surgeons one day. of lettuces a day with minimal cost and human input required. Robots will.

We are glad you are enjoying Advertising Age. To get uninterrupted access and additional benefits, become a member today. Log in or go back to the homepage. Published on February 27, Promoted as the first robot to be endowed with emotions, SoftBank says the gadget is sophisticated enough for tasks usually handled by shop clerks, receptionists and translators. But which ones will robots take first? First, we should define "robots" for this article only as technologies, such as machine learning algorithms running on purpose-built computer platforms, that have been trained to perform tasks that currently require humans to perform. Any job where your "special and unique" knowledge of the industry is applied to divine a causal relationship between numbers in a matrix is going to be replaced first. Unless you sell dreams or magic or negotiate using special perks, bribes or other valuable add-ons that have nothing to do with specifications, price and availability, start thinking about your next gig. Machines can take so much cost out of any sales process request for proposal, quotation, order and fulfillment system, it is the fiduciary responsibility of your CEO and the board to hire robots. But not report writing. Machines can be taught to read data, pattern match images or video, or analyze almost any kind of research materials and create a very readable or announceable writing. Text-to-speech systems are evolving so quickly and sound so realistic, I expect both play-by-play and color commentators to be put out of work relatively soon – to say nothing about the numbered days of sports or financial writers. Start now, before the machines take a creative writing class. Big Four auditing is in for a big shake-up, very soon. The current world population of 7. In practice, if everyone who ever wanted to be a doctor became one, we still would not have enough doctors. The good news is that robots make amazing doctors, diagnosticians and surgeons. And ultra-precise robo-surgeons are currently used for everything from knee replacement surgery to vision correction. This trend is continuing at an incredible pace. Maybe I can get someone to program my human doctors with a warm and fuzzy algorithm? First, technological progress is neither good nor bad; it just is. All we have to do is adapt. Adapting to this change is going to require us to understand how man-machine partnerships are going to evolve. This is tricky, but not impossible. We know that machine learning is going to be used to automate many, if not most, low-level cognitive tasks. Our goal is to use our high-level cognitive ability to anticipate what parts of our work will be fully automated and what parts of our work will be so hard for machines to do that man-machine partnership is the most practical approach. With that strategy, we can work on adapting our skills to become better than our peers at leveraging man-machine partnerships. Becoming a great man-machine partner team will not save every job, but it is a clear pathway to prolonging your current career while you figure out what your job must evolve into in order to continue to transfer the value of your personal intellectual property into wealth.

2: Robots: Is your job at risk?

Robots can now perform at and above human levels in creative and highly skilled professions. Using robots in the workplace is a smart move for companies, because robots are more cost effective and time efficient than humans.

BT Devices Man versus machine: Here are some jobs that have gone completely or which are under threat from robots. By Jamie Harris Last updated: The technology boom shows no sign of slowing. Here are some jobs from yesteryear that have already gone and some that are starting to be phased out.

Switchboard operator It was a job created by a technology revolution, but the days of manual telephone switchboards are long gone. In the olden days, a switchboard operator would have to physically connect calls by inserting phone plugs into the relevant jacks. They would also be able to participate in the call. In the largest exchanges, supervisors whizzed around on roller skates to keep up with all of their staff. Switchboard operators still exist within organisations today, although the systems are completely computerised.

Bowling alley pinsetter We often take for granted the fact that all bowling alleys have machines to pick up our fallen pins and rearrange them - as well as computers keeping a tally of our scores on a screen. In earlier times, a bowling alley pinsetter would be waiting at the end to pick up all the knocked-down pins and put them back in place. But the first lifts could not automatically stop perfectly on the level you wanted. Instead, they were manually controlled by a large lever, and a lift operator would have to judge when to stop the lift as well as opening and locking the doors.

Film projectionist When cinemas began, a film projectionist was needed to run mechanical projectors with 35mm celluloid rolls. It was quite a physical and task that required an experienced operator to load the film reels and change them to keep the film running without a hiccup. Now we have turned to digital projectors that are like professional-quality BT TV boxes, so simple that anyone working in a cinema can load movies.

What is artificial intelligence? Up until around the s, those who had to wake early relied on a knocker-upper or knock-up who would use a truncheon or long stick to hit your window until you woke up.

Bridge toll collector Bridge toll collectors still exist but their days are numbered as we move onto automated solutions. The Dartford Crossing is a prime example of this, which has removed all its toll collection booths in favour of an electronic number plate recognition system. Drivers can pay before or up to 24 hours after incurring a charge on the phone, via text, online or in local shops. The system is used across the world today. But perhaps not for long.

Self-service checkouts are found in nearly every supermarket in the UK now, and it only takes one or two operators to manage a dozen checkouts or more. Now one person can monitor a dozen self-checkouts, to correct the mistakes we make as customers.

Railway station ticket seller Similarly to cashiers, railway stations up and down the country now have machines where passengers can buy and collect tickets, and many remote stations are unmanned unless the ticket inspectors are making a random check. Confused tourists trying to understand the rules of an off-peak time advanced supersaver fare will be the only ones looking for an open ticket window.

Factory worker The number of factory workers in manufacturing has fallen sharply because of technological intervention, enabling machines to take on the repetitive heavy labour. Robots now carry out the majority of tasks on their own, meaning only a few human staff members are required to keep an eye on them and carry out maintenance.

3: What happens when robots take our jobs? | World Economic Forum

We all know, or at least suspect, that robots are taking people's jobs, but new research shows the dramatic degree to which industrial robots are replacing human workers and forcing down wages.

Expand Are humans becoming obsolete in the workforce? All signs point to "yes. By there will be 1. Robots are currently analyzing documents, filling prescriptions, and handling other tasks that were once exclusively done by humans. Pharmacists The next time you drop off a prescription order, you might see a robot behind the counter. Once computers at the new pharmacy electronically receive medication orders from UCSF physicians and pharmacists, the robotics pick, package, and dispense individual doses of pills. Machines assemble doses onto a thin plastic ring that contains all the medications for a patient for a hour period, which is bar-coded. The pharmacy system, which was phased in over the past year, so far has prepared , doses of medication without error. The automated system also compounds sterile preparations of chemotherapy and non-chemotherapy doses and fills IV syringes or bags with the medications. Advertise Lawyers and paralegals Instead of paying an army of lawyers and paralegals to review documents, software can do the job in a fraction of the time for a fraction of the cost. With human supervisors in the passenger seat, seven test cars have driven 1, miles without human intervention and more than , miles with only occasional human control. Equipped with a wide array of sensors and dexterous five fingered hands, it will initially handle menial jobs such as cleaning the spacestation and assisting humans in space operations. However, it could one day venture outside the station to help spacewalkers make repairs or perform scientific work, according to NASA. Advertise Store clerks Companies are increasingly looking for ways to sell more products with fewer employees. ATM machines reduce the need for bank tellers, virtual assistants can answer the phone 24 hours a day, and self-service machines are reducing the need for checkout clerks. Retail employment has barely budged over the last year despite stronger sales at major chains. According to Wired, the robot is equipped with a GPS monitor; it can be programmed to differentiate between fire and no-fire zones, to open doors, and even to drag out injured bodies. Advertise Rescuers Robots can reach areas that are inaccessible to humans and provide crucial help in rescuing victims from natural disasters. Scientists such as Satoshi Tadokoro of Tohoku University, based in Sendai, have offered the use of their robots to assist in the rescue efforts that are underway in Japan. Tadokoro has offered the use of a snakelike robot that can enter tight spaces and use a camera to survey them, which could be helpful in collapsed buildings. Sportswriters and other reporters Using software developed by Northwestern University, Narrative Science specializes in machine-generated stories. After a game, scorekeepers e-mail game data to Narrative Science, which feeds it into a computer and spits out a story in minutes.

4: 10 Jobs where Robots Really are Replacing Humans - Disruption Hub

Jobs that require only a high school degree are most in danger. Take cashiers and toll booth operators, for example. These jobs don't require much human analysis so are easier for machines to handle.

Some of the statistics surrounding automation are frightening, whereas others seem less dramatic. The gradual assimilation of robots as part into the global workforce seems an inevitable reality, and so might be the unemployment of a considerable number of human workers. Via natural language processing and machine learning, conversational computers can connect with customers on a personal level. Financial company Swedbank uses an AI powered personal assistant called Nuance Nina for customer queries, and in 78 per cent of cases the issue is resolved immediately. Company research found that the majority of customers preferred interacting with a virtual assistant to trawling through FAQs. As the capabilities of AI and natural language processing improve, robots may edge out humans by understanding different languages. Founded in , Starship Technologies has worked to answer these questions by developing courier bots that can carry 10kg and are relatively cheap to build and repair. In future, Starship plans to deploy hundreds of courier bots. This will disrupt the numerous gig economy couriers now working for companies like Uber and Deliveroo. Surgeon Healthcare has benefitted hugely from robotics, from medicine dispensers to disease diagnosis. However, advanced robots now match and even outperform surgeons. Having an operation under a robot surgeon may even make patients feel more comfortable, which is fantastic for healthcare but not perhaps for medical professionals. Farmer Agriculture lies at the heart of modern technological development, but the industry has come a long way since the first farming machines began to reduce labour. Farming has long adopted IoT enhanced robotics as a production aid, but now there are bots which can grow crops from scratch without human influence. FarmBot is the next step in precision farming and runs on open source software. The robot sows and feeds the crop , as well as controlling weeds. It can also be manually controlled via an app. Security guard Palo Alto based robotics company Cobalt has revealed a mobile, robotic security guard equipped with degree cameras, thermal cameras, laser scanners, a microphone and long range RFID. Unlike human security workers, the bot can stand on guard constantly without needing to take breaks, and has a complete view of its surroundings. Unfortunately, security bots received some bad press after a toddler was knocked over in a California shopping centre. However, these accidents will become less common as sensors and cameras improve. Retail assistant Conversational interfaces are already an established part of online retail, but robots are cropping up in physical shops as well. The bilingual bots will deal directly with customers as they walk through the door, finding and locating desired items. In future, quirky social robots could help shoppers to choose products as well as locating them. Fast food worker In a fast food burger restaurant in Pasadena, you can find Flippy the robot. Flippy is essentially a small cart with a 6 axis arm and sensor bar , and it does exactly what you might expect. The bot was created by Miso Robotics and is currently being trialled by CaliBurger. Over two years, CaliBurger plans to install Flippy in 50 locations. The employment of robot cooks in fast food chains could affect 2. Journalist Robot journalists might not have the human touch, but they have proved that they can produce articles of the same quality as a seasoned writer. The first article to cover the L. Through AI, bots are far quicker at drawing together and condensing masses of information. The articles written by journobots still require the input of a human editor, but even so, writers especially of news commentaries will be seriously affected. Autonomous vehicles are now an unavoidable reality, so why pay a truck driver when the trucks can drive themselves? Late last year, Uber sent a self-driving truck on a mile delivery journey to drop off 50, cans of beer. Human employees may still be needed to keep an eye on cargo and supervise the route, but this will be a considerably reduced role. Changes to the trucking industry will also effect businesses that survive on trucker custom. Soldier Robotics and the military go hand in hand, especially where the US army is concerned. Towering, advanced robots like Big Dog and the humanoid Atlas developed by Boston Dynamics have been put to use in both training and real combat missions. In , the Russian military revealed its own answer to Atlas â€” the Iron Man, which was created specifically to replace humans in high risk environments. Robots can now perform at and above human levels in creative and highly skilled

professions. Using robots in the workplace is a smart move for companies, because robots are more cost effective and time efficient than humans. And as much as robots will gobble up jobs, they will also create them.

5: Robots May Replace A Lot More Human Jobs By | News & Opinion | www.enganchecubano.com

Robots May Replace A Lot More Human Jobs By The WEF's "Future of Jobs " report found that 75 million existing jobs will be automated by , and 52 percent of current job tasks will be.

Others believe robots are the key to ultimate freedom from work that humans find dull or dangerous. During the RoboUniverse conference earlier this week, robotics companies strutted their computer-brained friends around the Javits Center. Some robots could climb stairs , others could pick up and place objects, while others could drive you around the sidewalk without your exerting any effort. The majority of executives at the conference explained how robots are here to rescue us from manual labor and will help to make our companies leaner, more profitable, more consistent, and more competitive. Robots enhance human work. UR has sold about 8, robots around the world. But the applications are endless: One robot assists a neurosurgeon during surgery, another UR bot films football matches in Europe, and another makes custom flip-flops. Employees require minimal training to learn how to teach a robot a certain task and put it to work, he says. The ease of adoption is important as employees--to avoid losing their jobs--essentially have to learn how to operate the robot. In free-drive mode, an operator manually moves the arm through a task and the movements are recorded and programmed into the software. Remove the rose-tinted glasses. Many researchers say automation will replace humans at a faster clip than humans will be able to create and train for new jobs. According to an Oxford University study from , about 47 percent of total U. Nineteenth-century British economist John Maynard Keynes predicted widespread chronic "technological unemployment" due to the advances of technology. We are suffering, not from the rheumatics of old age, but from the growing-pains of over-rapid changes, from the painfulness of readjustment between one economic period and another. The increase of technical efficiency has been taking place faster than we can deal with the problem of labour absorption. Others say laborers are not the only ones susceptible to automation. But will robots actually replace us all? Have our computers replaced us? The companies that have those technologies make the social policies and set those social policies that change the work force," Wise says. Robots take the hard things out of hard jobs and actually create more jobs, not fewer, she says. But for every robot we put in the world, there will be new jobs. Throughout history, from the Industrial Revolution to automobiles to computers and now with robots, humanity has always had to adapt to new technologies. Apr 15, More from Inc.

6: Los Angeles Times - We are currently unavailable in your region

A "Fourth Industrial Revolution," characterized by unprecedented developments in technology is coming, and may replace five million jobs by

Think your job is super-secure? Experts predict many existing roles will be automated within the next 30 years, and the robots are already taking over. Click ahead to take a look at some of the jobs automatons are stealing right now, and find out if yours could be on the line. A start-up called Moley Robotics has invented a percent automated, intelligent robot chef. The cooking automaton can learn recipes and techniques, whip up gourmet meals and even clean up after itself. Best of all, it can follow pretty much any recipe to the letter, precisely mimicking your favorite Michelin-starred chef or cookery writer. Da Vinci launched its range of operating robots way back in -- they have since performed two million procedures. Ultra-precise, robo-surgeons are currently used for everything from knee replacement surgery to vision correction. Futurologists predict robots will almost certainly operate on patients independently and replace human surgeons one day. The friendly android has snatched a fair few sales associate job roles from unsuspecting humans. Nestle uses Pepper robots to sell Dolce Gusto coffee pods and machines in department stores in Japan, as well as answer customer queries. More than just a gimmick, the robots have been rolled out to 1, stores in the country. An impressive 24 of the robots patrol shopping malls and offices in Silicon Valley, California. Packed with smart sensors, the robot is able to corral the animals in its care, monitor their health and analyze the quality of the pasture. The Vegetable Factory by Spread is an indoor hydroponic farm factory which is poised to produce thousands of lettuces a day with minimal cost and human input required. Robots will water, feed, harvest and transplant the crops. The machines are noted for their accuracy. Thousands of people die each year as a result of human pharmacist errors, so it could only be a matter of time before these devices become ubiquitous. Needless to say, the bots boast robust security -- if somebody tries to steal one, an alert is sent to the control center, a photo is taken of the thief and the device is tracked remotely. US tech company Narrative Science has pioneered natural language generation software called Quill that can transform raw data into intelligible reports and articles. The technology has been adopted by Forbes for its corporate earning reports, as well as Associated Press for financial and sports reports, replacing the journos who would normally pen such things. Army for instance has used the technology extensively in the ongoing "War on Terror. Robert Core, a quarter of U. Robots check in guests at Henn-na Hotel in Nagasaki, and a multilingual android greets customers at the flagship branch of the Bank of Tokyo-Mitsubishi in downtown Tokyo. Sales calls are already being generated by voicebots and, as artificial intelligence becomes more sophisticated, the bulk of telemarketing roles are likely to be performed by bots. Chinese real estate company Huashang Tengda used a 3D printer to build a two-story house in just 45 days in two months. Construction workers simply had to install the frame, wiring and plumbing, and the printer took care of the rest. Humanoid accountant bots are still some way off, but many companies are already automating their accounts, to the point that some no longer require dedicated accounts payable and receivable employees. Firms such as Lexmark and Basware currently offer fully automated accounts systems that do everything from matching purchase orders to flagging invoices for payment. Cue N1-C and B1-O. The star attraction of the Bionic Bar on the Royal Caribbean Quantum of the Seas cruise ship, the robotic duo can mix any one of cocktails to perfection in a matter of seconds. Carl can not only mix a mean cocktail -- he can even interact with customers by making small talk. Tracking down books and organizing the shelves are a major part of the daily grind for the average librarian, so this machine has the potential to take a significant number of jobs.

7: U.S. workers face higher risk of being replaced by robots. Here's why

Instead of paying an army of lawyers and paralegals to review documents, software can do the job in a fraction of the time for a fraction of the cost.

Is your job at risk? Today, a debate rages over workers and whether we too may become obsolete as society becomes automated. The fear of robots replacing jobs is real -- consider self-checkout kiosks and self-driving trucks. But, first, here are the jobs at greatest risk of being replaced by automation. High risk jobs Cashiers and toll booth operators Jobs that require only a high school degree are most in danger. Take cashiers and toll booth operators, for example. Some toll booth operators have already been replaced by automated systems such as E-ZPass, which is used in 16 states. Meanwhile, as many as 7. A shift is already underway. Big box retailers are another likely destination, whereas luxury and boutique stores will be slower to adapt the technology. They rely more heavily on a human staff to provide specialized service to customers. The obvious example is self-driving cars. Car and tech companies are in an intense race to get their first. Vivek Wadhwa, author of "The Driver in the Driverless Car," estimates that close to 5 million driving jobs will be lost in the early s, as vehicles achieve full autonomy. The optimistic case for drivers is that jobs often involve other tasks, such as unloading merchandise. However, as automated drones drop packages on door steps and in backyards, some of those jobs may be replaced, too. The autonomous vehicle industry will likely create new jobs, such as managers who oversee the fleets of vehicles. The Bureau of Labor and Statistics has estimated 80, fast food jobs will disappear by The increase in minimum wage in various states gives companies more reason to replace workers with machines. Low risk jobs Nurses and physicians A human touch is essential in health care, making roles such as physicians and nurses among the least likely to be replaced by machines. The earliest impact of automation on medicine is affecting radiologists, who are overloaded with data as they analyze medical images such as X-rays and CT scans. Arterys, a medical imaging startup, reads MRIs to measure blood flow through the heart. It does this in seconds, freeing up the humans to focus on other tasks. What happens when automation comes for highly paid doctors Youth sports coaches According to McAfee and Brynjolfsson, jobs that involve leading and inspiring others should be safe from a robot takeover. In addition, a robot is unlikely to be able to identify leaders, manage people with difficult personalities, and help the team form a bond. The tech advocacy group looked at Bureau of Labor and Statistics projections on workers that will be needed in Will scientists and engineers eventually be able to design a robot that can master those operations? Not likely in our lifetimes. Taryn Southern, who appeared on "American Idol" in , has relied on AI to deliver the instrumentals for her new album. But the lyrics were all her own. A computer program from Automated Insights writes articles about corporate financial reports and sports. Yahoo Sports uses the technology to provide weekly recaps in its fantasy football leagues. The Associated Press receives stories on more than 3, earnings reports each financial quarter. It also uses the technology for summaries of minor league baseball games. And the people who can deliver them are well-positioned for the future.

8: Nine jobs that humans may lose to robots - Business - Careers | NBC News

Claims that robots will steal our jobs are commonplace - but humans will find themselves working side by side with robots, rather than being replaced by them.

More on the agenda Technologies such as big data, advanced analytics, the internet of things, wearables, advanced robotics, learning machines and 3D printing are finding their way into factories. Needless to say, this transformation has profound implications for manufacturing employment, affecting everything from the size of the workforce, to the skillsets required and the locations of factories. A factory with no employees? The man will be there to feed the dog. The dog will be there to keep the man from touching the equipment. Lee reminds us in his blog on the World Future Society website. Productivity and employment, which rose and fell in tandem until the early s , now show an increasing gap, reflecting the fact that humans are being displaced by machines for many jobs. Carl Benedikt Frey and Michael A. So will this trajectory lead to a jobless future for manufacturing? Not quite “ or at least not immediately. But there is no doubt that Industry 4. A different type of manufacturing worker Some human manufacturing tasks, such as heavy lifting, precision positioning and visual quality control, will most certainly be transferred to or supported by robots, which are not only more efficient and effective than humans, but can communicate seamlessly with one another. Human workers will have to learn to work side-by-side and in conjunction with robots. This, along with wearables, augmented reality and other technologies, will change the nature of traditional blue-collar work, which will become both more complex and sophisticated, but also increasingly supported by technology. It is hard to predict whether Industry 4. Nevertheless, robots are still imperfect , and their capabilities are not yet sufficient to fully displace humans. Furthermore, and despite constant progress, the ROI for fully automated manufacturing is still unproven, raising doubts about the speed with which Industry 4. But the revolution is most certainly under way. A challenging Schumpeterian transition Throughout previous industrial revolutions, overall job creation has always been positive, but there are serious doubts that this will hold true for this fourth industrial revolution. There does seem to be a consensus that it will change all professions in ways perhaps we are yet to understand. The other problem with looking at the future of manufacturing employment through the lens of history is that it does not take into account the exponential nature of digital technologies. In addition, this transformation is not limited to manufacturing. It potentially touches all knowledge and service jobs, thereby raising a much bigger question for society. The risk we are facing in the near future is mass unemployment for some categories of workers, combined with lack of skills in other categories “ and the political and social implications of such imbalances. Will companies, individual governments and society at large including educational systems and social safety nets be able to adapt quickly enough to this new paradigm and create an environment in which all can contribute? For this to happen, all parties will need to collaborate in order to invent a systemic, social and sustainable model for a better future of work. The views expressed in this article are those of the author alone and not the World Economic Forum.

9: 21 jobs where robots are already replacing humans

The U.S. economy added million jobs in , capping the best two-year stretch of employment growth since the late s, pushing the unemployment rate down to 5 percent. But to listen to the.

Production and operation management But what if I dont want to go to college Democratic virtues of the Christian right Married To The Enemy Ragnarokk, the destiny of the gods The Lincoln bulletin Niebels methods standards and work design 13th Romantic books to Gods voice crying to the inhabitants of Weymouth, and the neighbouring towns Architectures and Mappings Sales Management and Organization Wireless home security system seminar report The prompting of the conscience Hip Hop in American Cinema Mexican Kickapoo Indians Papa murphys job application Franciscan Ireland Digital filter design matlab Husband, Lover, Spy Romantic rocks, aesthetic geology Lower Northeast Philadelphia And to the Eskimos. The fish shellfish cuisine I love Amino acids and nitrogen compounds House garden nation Dietary management of and behavior change in children and adolescents with high cholesterol Linda Snetsel Everything is political in a divided society John Hume Machine generated contents note: I The Forging of Smithee Studies Mette Maries homestead journal The curates awakening Reactivity in Molecular Crystals An introduction to optimization fourth edition Building the Mass Pike 6: Parkers Crossroads. (The Big Picture 184 Arms and the dudes Physicians and poetry. Tale Of Two Cities (Watermill Classics) Democracy in the family IV. Two years in the French West Indies, vol II. Chita and Youma. 2. The relation of the /