



Challenger, Gray & Christmas, Inc.  
The original outplacement company



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## The Rise of the Machines

### 5 JOBS THAT TECH CAN DO BETTER THAN HUMANS

**CHICAGO, June 17, 2015** – Are we just a handful of years away from a world ruled by the machines, a la *The Terminator*? Doubtful, according to employment authority John A. Challenger, chief executive officer of global outplacement firm Challenger, Gray & Christmas, Inc. However, he does warn that some jobs are at higher risk of complete automation; and, it may not necessarily be a bad thing, in some cases.

“It may seem, at times, that robots, computers and other technological advancements, will deem humans obsolete in the workplace. However, automation has been going on for decades now and we still need humans in most of the settings where robotics have made the greatest inroads. That being said, there definitely are some jobs that are at high risk of being entirely automated within our lifetimes,” said Challenger.

Challenger offered the following professions at risk of becoming replaced by technology:

#### **Umpires: “You’re Out!”**

Baseball has already embraced the use of replay video technology to make calling foul balls, home runs and close plays more accurate. It stands to reason that using an electronic strike zone to make more accurate and consistent calls at the plate could soon follow. It certainly could eliminate (or, at least, greatly reduce) player and manager arguments. The technology already exists. The Zone Evaluation System, in place in every ballpark since 2009, covers every angle of a pitch, photographing it over 20 times before it gets to the plate. The MLB’s Gameday app for smart phones and tablets includes this technology so people at home can see whether the home plate umpire got it right. It might be time to remove human error all together, since this data comes in real time and is rarely wrong.

### **Depressing Diagnosis for Psychologists**

A recent National Public Radio piece highlighted a software program called Ellie designed to help diagnose depression and PTSD in returning veterans. The program takes into account more than just what the subject says. It analyzes voice tone and inflection, facial and eye movements, whether the speaker looks down or leans away, and the veracity of the speaker's smile to determine diagnosis. In a study, Ellie determined depression and PTSD about as well as a large pool of psychologists, according to the report. While this technology may not ever replace human mental health professionals, the ability to diagnose mental health using data could not only convince more patients to receive help, but also set a treatment course more efficiently than humans.

### **The News Isn't Good for News Delivery**

A computer could never observe an event and convey its meaning or significance to the masses. However, as many journalists have experienced first-hand over the last two decades, the way their work is collected, edited and distributed, has undergone a sea change. WordSmith, a program created by Automatic Insights and used on wires such as the Associated Press, routinely issues automatically generated news items on sports scores, weather reports, and even earnings reports. So, while journalists still will be necessary, the number needed will continue to shrink, as will demand for editors, and other professions related to the delivery of news.

### **Truckers and Cabbies May Need to Reroute their Careers**

In 2012, Google began road testing a group of six autonomous (i.e., driverless) vehicles on California's highways and byways. The test fleet has since grown to 23 cars, cumulatively logging more than 700,000 miles and involved in just 12 minor traffic accidents, all of which were caused by other human-operated vehicles. Compare that to the trucking industry, whose vehicles, while logging a total of 268,000 miles in 2012, were involved in 77,000 accidents in which injuries were reported and 3,802 accidents resulting in at least one fatality. While autonomous driving will certainly help America's driving public, the earliest and most beneficial practical application could be to replace the nation's long-haul truckers and cab drivers. These career drivers, while providing a valuable service to the economy, often do so at the expense of public and personal safety. Fatigue, pressure to deliver goods and/or people quickly, and weak oversight have led to higher-than-average accident rates. Additionally, cab drivers are particularly prone to robberies and homicide. Both professions consistently rank high among the deadliest jobs in America.

## **Is the Song Over for DJs?**

The radio industry has gone through enormous change over the past several decades. One of the biggest change impacting the industry, though, has been consolidation, which has seen thousands of the nation's local radio stations concentrated into a handful of media conglomerates that can save money by simply broadcasting computer-generated playlists to their various markets. ClearChannel alone operates 1,200 stations across the country. Of course, the changing landscape of radio has accelerated in the internet age, as digital streaming replaces traditional terrestrial radio for many listeners. With access to algorithm-generated playlists on Spotify, Pandora and Rdio, who needs an actual DJ? The just-announced Apple Music subscription service hopes to break the mold by including access to its Beats One radio station, which will have real, human DJs to spin tunes and interview musicians. However, it will be able to reach millions of potential listeners with a handful of on-air personalities. Reaching that many listeners in the pre-Internet era would have taken hundreds, if not thousands of DJs and other personnel.