## Dr. Canton on NPR



By Erin Killian [exerpt]

Millions of Americans are scouring job sites, sending the dreaded networking e-mails, perfecting their resumes and thinking about how to best sell their skills. But what about developing a new set of skills, like starting a company, going back to school for clean technology, getting creative?

Just 20 years ago, there was no Facebook, Amazon or Google. Today, Google alone employs more than 20,000 people and "google" has earned verb status in the dictionary.

So where does the next jobs frontier lie? Here, experts weigh in on what they see as future growth industries — and how you can prepare yourself to take advantage of them.

## The Futurist

James Canton, who founded the Institute for Global Future, a San Francisco-based think tank that forecasts future trends and innovations, thinks quite a bit further outside the box than even microchips. He envisions workforces for entirely new industries: from workers who routinely decipher human genomes and map DNA to people who will shuttle to Mars to colonize the planet in 20 years (yes, he's serious).

But, looking one to three years out, Canton says engineers, architects, builders and urban planners will need to build a new green, clean technology infrastructure so the U.S. can cut down on its energy consumption. Cantor says scientists and inventors will have to find new ways of storing biofuels. And he says there will be a premium on people who can make sense of a cap-and-trade system, something President Obama often talked about on the campaign trail. Under such a system, companies face limits on how much carbon they can emit, but they also can sell their unused carbon credits to bigger polluters.

Canton also says health care has been "waiting for transformation for 35 years." He predicts a new set of jobs based on health information technology and consumer genomics — that is, specialists who map an individual's DNA sequence and then analyze it to predict future health. With DNA tests at a relatively affordable \$200, Canton believes more and more people will want to know the diseases they're predisposed to develop, so they can work to prevent them. Those facing dire prognoses may need to talk with genomics counselors.

Younger people "are more courageous, and they want to use technology to understand their health status," Canton says.

Opportunities in the space industry — including the private sector — are as limitless as space itself, Canton says, citing the International Space University in France. It "trains space executives and planners to be a part of the public and private industry," he says. He also says "there are actual plans at NASA to colonize Mars" and believes it could happen by 2030.

"I'm not talking about selling condos on the moon," Canton says. "I'm talking about an entirely new skunk-works industry funded by multibillionaires."

Billionaires such as Richard Branson, who started Virgin Galactic, are funneling money into space travel, and Canton says an industry is going to sprout around it, like space mining.

"If I was looking for an exciting job, and I was finishing my B.A., I would look at [being a] cosmologist — something involving engineering and space," Canton says. "It's going to be a very exciting area, because we will leave the Earth. Everything relates to that high frontier."