8 Emerging Careers from 2012

Data science, geospatial technology, homeland security, and entertainment technology are some of the new and emerging occupations I blogged about last year:

1. **Data science**

Big Data staff analyze user behavior in unstructured data (e.g. web clicks, audio, video, blogs, forums, search terms) to make content appealing and profitable. From fanalytics (think Moneyball) to Presidential election and Hurricane Sandy predictions, data analytics skills are hot.

Job titles: data management analyst, data engineer, data scientist, statistical analyst, analytics architect, clinical data analyst, business intelligence analyst

2. **Geospatial**

Geographic information systems (GIS) are used in 80% of governmental activities such as city planning, transportation, disaster recovery, and disease prevention. Geospatial technology professionals are also recruited by environmental consulting firms and utilities, among others.

Job titles: GIS software developer, geographic systems technician, remote sensing scientist, GIS database analyst, geomatics engineer

3. **Education**

Distance learning and "serious games" are used in fields such as corporate training and recruiting, military simulations, universities, health care (exergames), city planning, engineering, and politics.

Job titles: distance learning coordinator, instructional designer and technologist, eLearning designer, learning and performance specialist, instructional systems designer

4. **Linguistics**

Computational linguists use voice biometrics to prevent fraud and security breaches. They also work in national security (terrorist surveillance), air traffic control, and speech science. Clinical uses in computer games have enabled autistic children to say, "I love you mommy" for the first time.

Job titles: natural language processing (NLP) developer, speech scientist, speech output designer, voice developer, search quality engineer, internationalization engineer, multilingual graphic designer, social game localizer

5. Homeland security

The most competitive applicants for defense and intelligence jobs have advanced study in a 'strategic language' such as Chinese, Arabic, Urdu, Farsi, or Russian." Homeland security professionals evaluate global threats such as terrorism, cyber-crime, human trafficking, contraband smuggling, and financial crimes. They also conduct investigations to protect critical infrastructure industries against sabotage or attack.

Job titles: intelligence analyst, business continuity planner, cryptanalyst, signal analyst, language analyst, transportation security specialist, search and rescue controller, immigration services officer, import specialist

6. IT development and design
Are you an artistic techie? Videogame designers and animators have a future in interactive entertainment. In addition to the news media, consulting and law firms need infographic designers.
Savannah College of Art and Design boasts that its graduates have "triple-threat credentials as artists, designers, and programmers."

Job titles: augmented reality specialist, iPhone game designer, sound designer, usability designer, visual artist, graphic journalist, business/infographic analyst

7. Cybersecurity

A Deloitte study identified mobile devices as the leading computer security threat for 2012. Computer security jobs include "ethical hacking," fraud prevention, brand protection, and social media monitoring.

Job titles: security engineer, security penetration tester, application security specialist, Internet fraud analyst, brand protection analyst, risk management specialist

8. Social media marketing

Linguistics is a key to reaching international customers through localization marketing. Data analysis helps marketers target customers, develop new products, and improve profitability.

Job titles: global SEO specialist, social game localizer, search marketing strategist, web marketing analyst

Do you notice some patterns in these emerging occupations? Think math, computer science, and linguistics with a generous dose of creativity.

Source: www.careerthoughtleaders.com