How to find international GIS jobs

Be advised that if you pursue international GIS jobs, you may have some difficulty (assuming you're a US citizen) getting work overseas. In some cases, if you have a particularly advanced degree or are very experienced as a surveyor or cartographer, for example, you may be in demand enough that international GIS jobs will be open to you regardless of status.

Pursuing GIS jobs as a career

Some GIS jobs require you to go to college and get at least a bachelor's degree, while others simply require a high school diploma and perhaps some technical school education. For example, a career as a cartographer requires a bachelor's degree, while a career as a GIS technician requires just a high school diploma and on-the-job training and experience.

Working as a cartographer

Cartographers are often called "geographic information specialists" these days because they so often use GIS technology in their work. Cartographers must get a bachelor's degree and some type of experience in engineering or physical science. They must also have considerable computer experience, and will need to continue to learn the new technologies as they become available.

Cartographers map new areas and update the information on maps that have already been created; it used to be that they did this via paper and pencil, but now they do this largely on the computer. They do a lot of their work in the field as well, physically taking measurements and noting landmarks and other characteristics to include in their maps.

Salary

In general, cartographers make about $60,000 a year working in government GIS jobs or about $46,000 a year if they work in the private industry. Salary is also dependent on experience.

Working in GIS jobs as a technician

If you want to be a GIS technician, you don't need a college degree. You'll need to have graduated from high school and most of your training will come from on-the-job experience. As a technician, you help surveyors manage their equipment, including measuring devices such as a theodolite. The theodolite looks like a telescope and measures horizontal and vertical angles, distances and elevations. When you operate the theodolite, you look at vertical rods held by "rod workers". These rod workers, too, are usually GIS technicians in training. You take measurements with the rods and then record them. You may also use measuring tools like surveyors' chains. All of this is done to get measurements used by the surveyor in his work. In short, then, a GIS technician basically works as an assistant to the surveyor.

With these tools you measure distances on pieces of land and notate them. You may figure out what land boundaries are to help prepare maps of new uncharted territory. You may also figure out what the total dimensions or acreage of an unmapped piece of land such as a residential housing plot are.

GPS, or global positioning systems, are also becoming increasingly important for GIS jobs in general. Although most of us know about GPS because it helps us find our way from point A to point B in our cars, surveyors and GIS technicians use GPS to record radio signals that satellites transmit at certain points. These measurements are then used with technologies like CAD, or computer-assisted drafting.

Background education
Cartographers must have a bachelor's degree and must have knowledge of engineering, math, the sciences, and so on. GIS technicians must have graduated from high school. It is also recommended that you have completed courses in algebra, trigonometry, geography, and computer science. Normally, when you begin your career as a GIS technician, you start as an apprentice or rod worker. You can then graduate to obtain instrument work after you've done this for several years. Alternatively, you can decide to go to night school or get an online education so that you can start working as an instrument worker immediately. In addition, you're going to have to keep on top of technology as it advances, meaning that you may take continuing education. You can also become a surveyor by pursuing a four-year degree while still working as a technician.

Certification

Getting certified as a technician is a plus, even if it's not necessary. Certification for technicians is offered by the National Society of Professional Surveyors. You'll be certified at four different levels as your career continues, with each level being documented by passage of a written examination. As stated previously, you can also decide to become a surveyor if you acquire more education and experience.

Other qualifications

You'll need to be physically fit to be a technician and you'll need to have a strong focus on detail. Because you'll be working with people, good interpersonal skills are also necessary. Cartographers, too, must be physically fit if they work in the field.

Salary

International salaries vary, but in the US you'll make about $30,000 a year as a GIS technician on average, depending on where you work. If you are unionized you'll make even more. With government GIS jobs, you'll make approximately $35,000 a year on average.

In conclusion

GIS has provided new technologies to old professions. GIS technicians, for example, can get started working right out of high school, while those who are interested in pursuing cartography will need a bachelor's degree from an accredited university. Both professions allow you to advance with further education and provide international GIS jobs opportunities as well, in some cases. If you wish to pursue an international GIS job, go online and peruse the many job sites that have these positions listed. These jobs may be more difficult to get if you are a US citizen, but will certainly make for an interesting career if you can get them.