Book Review: Developing Bioinformatics Computer Skills

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It's no deep secret many Information Technology (IT) professionals today are facing a rough road finding gainful employment. In fact, according to Information Week, nearly 10% of the US IT workforce vanished in the last two months of 2002. More aptly put, some 272,530 American IT professionals in October were unemployed by December. This data is corroborated by the Bureau of Labor Statistics. Where did they all go? Many almost certainly got jobs in other professions and many still could be seeking employment. Employment counselors are encouraging IT professionals to "repurpose" those hard earned tech skills.

Bioinformatics is a ripe apple waiting to be eaten. Bioinformatics simply stated is the computational and analytical methods to biological problems. If this sounds like an open ended explanation, it is. In fact, according to O'Reilly's definitive publication on the topic, "Developing Bioinformatics Computer Skills" by Cynthia Gibas and Per Jambeck, there are several different definitions to Bioinformatics, but suffice to say all revolve around applying IT to the management of biological data.

Chapters one through six delineate the basics including the typical and common software and hardware requirements for Bioinformatics. I will tell you right now if you want to be successful in this fresh field, you must learn Unix. The book points out why. Unix is used extensively in universities and academia where the abundance of software for scientific data analysis is developed. Not to mention in the mid nineties, the only workstations able to visualize protein data structure in real-time were Silicon Graphics and Sun Unix workstations. Linux fans rejoice! As the book points out, "Linux is an excellent platform for developing software, so there's a rich library of tools available for computational biology and research in general."

Sound interesting? At this point you could be overwhelmed and ask yourself, "Where do I start?" Well, you may want to purchase O'Reilly's "Developing Bioinformatics Computer Skills" to see what the fuss is all about, determine whether you have what it takes to succeed in this new field, and most importantly, get an introduction to the software tools for biological applications from the inside out. Bioinformatics is a growing field that will continue for the unforeseeable future.

If you're serious about turning around that stagnant IT career and expanding your education, you may find yourself in the same enviable position you were three years ago…needed and wanted! But don't let me mislead you. As the book points out, Bioinformatics is first and foremost a biological science.

"Developing Bioinformatics Computer Skills" from O'Reilly is available for $34.95. Members of PC User Groups can receive a 20% discount on this book or any other O'Reilly title. For more information about purchasing books with your User Group discount, go to www.oreilly.com and use code DSUG.