

To whom it may concern:

I am a research scientist who recently graduated with my PhD in Computer Science, specifically machine learning. Before I started my PhD I was unemployed because the dot-com crash of 2000 had just occurred and my startup company went under like so many others. There is no way I could have afforded to pay for any scientific articles to read while I was unemployed. Moreover, I had lost both my parents earlier that year along with my job and was in desperate need of mental fortification against depression that threatened to overcome me. I found solace in scanning the free preprint server called <http://arxiv.org/> each and every day and found that I could enjoy math and computer programming at a deeper level than I had ever been able to before perhaps because of my need to cope with grief and move on in a meaningful way. I found meaning in the papers I read and started to write computer programs to study, simulate, and verify the papers and results that were simple enough for me to understand. I sent these programs via email to computer science professors at far-away universities and soon enough was offered a PhD position. I gladly accepted this offer for a new life and new direction and it had the desired therapeutic, intellectual, and economic effects. Six years later I have graduated with my PhD and had a couple decent papers published that continue to be of interest in the scientific community and generate enough economic derivative impact to have led to several patents, none of which I hold. I have inspired students in America, Italy, and other countries by participating in classroom exercises utilizing the new research area of machine learning using data compression. The work has been applied to automatic machine translation of human languages, national security and defense, biological genetic, immunological, and neural signal analysis, and text authorship detection to name a few of the more significant areas. I also have new friends and a new community of support around the world and feel more a part of a global society of scientists.

Moreover I am much more able to contribute to America's economy now with the skills that I developed in that time period. None of this scientific research would have been possible without the free preprint server. I feel honored to be able to upload some of my preprints to this server and have noticed through email that its existence continues to stimulate interest around the country and the world in the line of research that our group helped pioneer. The economic benefits of opening the doors of opportunity to people in difficult situations cannot be emphasized enough and America cannot afford to turn its back on its future scientists and engineers by shutting down the free access to scientific information that we have enjoyed on the internet since its inception. Please realize that even a small fee of just a few dollars per article is enough to keep almost all of the taxpaying public (our as-yet-undiscovered scientists) out of the scientific loop entirely at the most important point in their careers: the beginning, before they are able to get paid to do science. It is this group that we must

encourage with our policies and acknowledge their contribution to our work with their tax payments by providing as much open access as possible. We must continue to carry our noble egalitarian tradition of true enfranchisement in higher education for all people who have the interest and ability to pursue it. We must appreciate the unique inspirational qualities that only the internet can bring in its low cost delivery of textual information to all people. If we value science and our future economy, it is imperative to keep the positive feedback cycle of higher education flowing through the internet to allow the new Digital Renaissance for scholars everywhere to continue to unfold. Never before have so many people around the world had access to the internet through inexpensive devices like mobile phones, and thus we have never had so much to lose. Please don't let us down.

Rudi Cilibrasi
Machine Learning Researcher and Scientific Author

--

Happy to Code with Integrity!

<http://www.nspe.org/Ethics/CodeofEthics/index.html>