



A Perspective on Industry/University Relationships in the US

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Abstract

This perspective is from that of one who has served recently at both the US National Science Foundation (NSF) and the US Defense Advanced Research Projects Agency (DARPA). It is therefore biased from the point of view of the US Government's interest in fundamental research in information technology at these two agencies and other agencies that participate with them in Information Technology Research and Development. NSF has the mission of ensuring the health of science and engineering in US universities and rarely funds industry for research purposes. On the other hand, funded subcontracts from universities are possible in the Information Technology Research Program, if they contribute to the overall research goals of the university. Other than a Small Business Innovation Research Program, NSF does not usually fund industry directly.

Part of the reason why this situation has remained thus for so long may be due to the existence of DARPA and its long-term partnership with NSF. Most of DARPA's IT Programs fund industry as well as universities. They also employ a wider range of funding vehicles than NSF

that address issues such as intellectual property in various ways. University researchers in IT are often funded by both NSF and DARPA either at the same time or at different times in their career. DARPA funding allows them to interact closely with industrial researchers in the context of program activities, such as in the speech and natural language communities. While this is a neat division of responsibilities for the US Government, it emphasizes university-industry collaboration that has military relevance and tends to ignore such collaboration when it has educational or workforce relevance. This is because DARPA doesn't often fund projects with educational or curricular goals.

While there has been increased emphasis on workforce development in recent years at NSF, the most difficult problem in university-industrial research will be intellectual property. The US government is becoming more flexible in recent years on this issue, but universities have probably gone in the opposite direction. The need to deal with this issue may become a major driving force in future funding for fundamental research.

