

Motivation

Computing technology has changed, and is continuing to change the world. Essentially every aspect of life has been impacted by computing. Just-in-time inventory allows companies to significantly reduce costs. Universal digital medical records promise to save the lives of many of the estimated 100,000 people who die each year from medical errors. Vast information resources, such as Wikipedia, now provide easy, quick access to a breadth of knowledge as never before. Information sharing via Facebook and Twitter has not only brought family and friends together in new ways, but has also helped spur political change around the world. New interdisciplinary fields combining computing and science will lead to breakthroughs previously unimaginable. Computing-related fields in almost all areas of study are emerging.