What is expected from future statisticians for them to adapt to the future of the profession?

Jef L. Teugels
Catholic University of Louvain, Leuven, Belgium jef.teugels@wis.kuleuven.be

Statisticians should be trained with an open background and mind. This will allow them to deal with problems that are often claimed by computer scientists and/or applied mathematicians. There is no reason for future statisticians to shy away from new ideas or from mathematical and computational tools. Just like computer scientists and thanks to their variety of skills, they should be optimists and take up the many opportunities to attack problems. More and more aspects of our lives are being affected by the use of data and statistics to change things. Future statisticians should gain some ideas of where statistics show up in daily life. Statistics is probably the discipline that has the widest in-depth application of all the sciences. Whatever the interest, there is usually a need for statistics in that field, from the humanities to the physical sciences, with applications to industry, finance, marketing, sociology, psychology, medicine and many others included. This variety is extremely attractive and should trigger the interest of future statisticians. The number of job opportunities and the variety of things to do are increasing dramatically, whereas the supply of statisticians is far lower than the demand. Statistical careers in academia abound. Careers in practice are often even more convincing and attractive since practical problems are important and their research is usually very intuitive for young people. We first offer some thoughts about the general perception of statistics and discuss classical as well as newly emerging areas where statistics plays a dominant role. After dealing with job opportunities we will survey the general and the technical skills that can be expected from future statisticians.