

Biography of Five Great Statisticians: From Pearson to Efron

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The purpose of this paper is to provide a history of statistics and probability, as well as how these topics originated and developed. The biographies of five great statisticians who have played a key role in evolution of statistics and probability are examined and analyzed. Karl Pearson is the founder of modern statistics and one of the developers of mathematical theory of evolution. Ronald Fisher is a prominent mathematician and statistician. He is known as the father of statistical science. He introduced some important concepts such as Fisher information, the Z-distribution, F- distribution and ancillary statistics. Jerzy Neyman is also one of the grandees of modern statistics whom with the help of Karl Pearson's son, Egon Pearson, defined some new concepts in the testing of statistical hypothesis such as simple hypothesis, compound hypothesis, type I and II errors, power of a test, critical region and significance level. Debabrata Basu is one of the leading statisticians who has played an important role in most branches of statistics. During his meeting with Fisher, he replaced the Bayesian approach with the Neyman-Pearson approach, the classical framework of statistics. His basic theorem on the relationship between sufficiency, ancillary statistics and independence is one of the most prominent mathematical concepts. Bradley Efron is known for his computer-aided statistical techniques, such as the bootstrap sampling and the Jackknife methods. This scientist has done research in various statistical fields such as astrophysics, clinical trials, differential geometry, empirical Bayes, inference for microarray gene expression data, probability theory, survival analysis, and sampling.

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