# On the Superiority of Internet-Based
# Mass Enrolment to High Schools over Traditional

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**Abstract.** Fairness in educational enrolment means that a student with better previous educational results is preferred to a worse student in every school they apply to. In this paper we show that in the case of mass enrolment it is difficult to make it entirely fair. This observation has lead us to the design and implementation of a client-server enrolment system working over the Internet. We make an attempt to formally prove that computer support is necessary to achieve fair mass enrolment. First, we formally define enrolment and its fairness. Second, we formally criticize mass enrolment performed with the use of traditional methods, and third, we introduce algorithms coordinating computerized mass enrolment coordination and prove their correctness.

**Key words:** algorithms, combinatorial problems, e-Government, e-Education, educational enrolment, enrolment fairness